

**Transformational Leadership, Well-Being, and OCB:  
The Mediating Role of Belongingness**

Dissertation submitted in partial fulfilment of the requirements for the degree of

**Master of Science in Applied Psychology**

at the University of Canterbury

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2020

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## **Abstract**

**Purpose:** The purpose of this research was to investigate whether a sense of workplace belongingness mediated the relationship between the idealised influence and intellectual stimulation dimensions of transformational leadership, and employee well-being and OCB.

**Methods:** A self-report online questionnaire was distributed to 94 full-time white-collar employees at a single timepoint. All data was statistically analysed using IBM SPSS (version 25). Furthermore, the PROCESS Macro for SPSS was used to test the hypotheses, main effects, and indirect effects.

**Findings:** The results from this study showed that a sense of workplace belonging mediated the relationship between the idealised influence dimension of transformational leadership, and employee well-being and OCB. When controlling for idealised influence, there was no significant pathway between intellectual stimulation, workplace belonging, and any of the outcome variables.

**Originality:** This study is the first to explore potential antecedents to the experience of workplace belongingness.

**Research Limitations/Implications:** The findings of the current study demonstrate the significance of leader behaviours in facilitating a sense of workplace belongingness.

However, this study does contain limitations commonly associated with cross-sectional designs and therefore future research would benefit from the use of a time-lagged, longitudinal study design.

**Practical Implications:** Organisations should implement practices that encourage the development of healthy and supportive interpersonal relationships between employees. In doing so would promote a sense of belongingness, and in turn create a workplace environment wherein employees experience greater well-being and perform more OCBs.

## Introduction

A sense of belonging in the workplace can be conceptualised as the extent to which an employee perceives they are personally accepted, valued, cared for, and supported by those with whom they work (Cockshaw & Shochet, 2010; Shore et al., 2011). Belongingness is a construct of interest in organisational studies because it has been associated with prosocial work behaviours and well-being (Cockshaw & Shochet, 2010; De Cremer & Van Knippenberg, 2002; Den Hartog, De Hoogh, & Keegan, 2007). Furthermore, workplace belongingness has been associated with an increase in employees' self-reported happiness (Huynh, Xanthopoulou, & Winefield, 2014), as well as enhanced job satisfaction and retention (Huynh, Xanthopoulou, & Winefield, 2013). Yet, there is presently a scarcity of literature pertaining to employees' sense of belonging in the workplace since it is a relatively new construct (Huynh et al., 2014). In particular, little is known about factors that contribute to a sense of belonging at work.

According to Baumeister and Leary's (1995) seminal article on belongingness, a sense of belonging is achieved when two key criteria are satisfied: 1) an individual frequently interacts with others in a pleasant manner; and 2) these interactions are consistent over time and reflect concern and care for each other's welfare. Drawing on Baumeister and Leary's (1995) criteria, researchers later conceptualised *workplace belongingness* as the extent to which one perceives they are important to their organisation and are personally accepted, valued, supported, and cared for by the other individuals in their organisational environment (Cockshaw & Shochet, 2010; Shore et al., 2011). Based on this conceptualisation, leaders may play an important role in facilitating belongingness within employees given the position of power and influence they hold. For example, leaders who share decision-making encourage employees to work interdependently and enhance employees' sense of psychological ownership as well as feelings of trust, responsibility, and importance, all of which contribute to a sense of belonging (Randel et al., 2018). Additionally, when leaders treat their followers

fairly, they relay to those employees that they are respected members of the work group (Randel et al., 2018). This may reinforce one's perceptions of their value and connectedness to their work group, which in turn contributes to a sense of belonging (Tyler, DeGoey, & Smith, 1996). Furthermore, leaders provide their employees with support by making them feel comfortable and conveying to said employees that their best interests are of importance (Nemhard & Edmondson, 2006; Randel et al., 2018). By acting in this manner, leaders model this behaviour to other employees, which in turn may prompt the employees to replicate these acts of support and care that help promote perceptions of belongingness (Randel et al., 2018).

The first aim of the present study is to explore the impact of transformational leadership on a sense of belonging at work. This transformational leadership framework has been chosen here, as transformational leaders provide individualised consideration, wherein followers feel cared for and perceive that there is someone they can rely on to support them (Bass, 1990, 1999). Additionally, these leaders also encourage followers to think creatively and be involved in the decision-making process (intellectual stimulation); develop relationships with followers based on mutual trust and respect (inspirational motivation); and they also articulate an appealing vision of the future and accentuate the importance of collective goals and objectives over that of the individual (idealised influence) (Bass, 1990, 1999). Ultimately, transformational leadership behaviours may serve as antecedents to employees experiencing a sense of workplace belongingness, wherein employees feel valued, accepted, and supported. Hence, this study uncovers whether and how transformational leadership influences workplace belongingness.

An empirical examination of the relationship between transformational leadership and belonging not only serves to uncover whether and how leadership influence employees' sense of workplace belongingness, but may also highlight underlying psychological mechanisms that account for the relationship between leadership and positive employee attitudes and

behaviours. Transformational leadership has been demonstrated to be one of the most effective leadership styles, and within the organisational literature, it has frequently been positively associated with several beneficial employee and organisational outcomes (Avolio, Walumbwa, & Weber, 2009; Judge & Piccolo, 2004; Kelloway, Turner, Barling, & Loughlin, 2012). Of interest to this study, the extensive body of research pertaining to transformational leadership has suggested its positive association with followers' organisational citizenship behaviours (OCB) and well-being (Arnold et al., 2007; Wang et al., 2011), though the psychological mechanisms that account for this relationship remain largely unexamined. Hence, the second aim of this study is to answer calls for research to advance the current body of knowledge pertaining to the mechanisms through which transformational leadership influences the attitudes and performance of followers (e.g., Bono & Judge, 2003; Hetland et al., 2015; Humphrey, Burch, & Adams, 2016) and explore whether transformational leadership fosters OCBs and contributes to employee well-being through its impact on belongingness.

### **Transformational Leadership**

Transformational leadership encompasses a set of four leadership dimensions: *idealised influence*, *inspirational motivation*, *intellectual stimulation*, and *individualised consideration* (Bass, 1990, 1999). These dimensions inspire followers to rise above their own self-interest for the purpose of achieving organisational goals (Bass, 1990, 1999).

First, idealised influence, synonymous with the attribution of *charisma*, reflects followers' perceptions that the leader conveys a clear vision and demonstrates confidence in their abilities to accomplish a shared objective. Further, leaders are viewed as worthy of respect, ethical, and role models. Second, inspirational motivation entails a leader conferring meaning to the work at hand, setting high standards and challenges while concurrently encouraging followers to achieve them, and providing followers with guidance and

clarification as to how to approach their work. Third, intellectual stimulation involves a leader assisting their followers in developing new ways of approaching obstacles and promoting critical and rational thinking. Lastly, individualised consideration entails a leader being attentive to their followers' developmental needs (Bass, 1990, 1999). Through exhibiting the aforementioned set of behaviours, transformational leaders are able to provide the required guidance and support to aid their followers' development by building on their strengths (Bacha, 2014; Bass, 1990, 1999).

There is a growing volume of evidence to support the positive impact of transformational leadership on desirable organisational outcomes. For example, followers under transformational leaders exhibit higher levels of performance compared to followers under the influence of less employee-focused leadership styles (e.g., management-by-exception transactional leadership) (Bass, Avolio, Jung, & Berson, 2003; Dvir, Eden, Avolio, & Shamir, 2002). Furthermore, transformational leaders are more likely to enhance the job satisfaction and affective organisational commitment of their followers through providing individualised consideration and influencing how followers perceive their job characteristics, organisational goals, and work environment (Piccolo & Colquitt, 2006; Walumbwa, Orwa, Wang, & Lawler, 2005). Consequently, followers of transformational leaders are also less likely to develop intentions to leave their job, which in turn helps organisations retain talent and minimise the costs associated with hiring and training new employees (Caillier, 2016; Tse, Huang, & Lam, 2013; Waldman, Carter, & Hom, 2015).

**Transformational CEOs.** Transformational leaders have consistently been demonstrated to enhance the performance and positive attitudes of employees as well as work teams (Judge and Piccolo 2004; Ng 2017; Su, Wang & Chen, 2019). Much of this prior research pertains to organisations' lower-level leaders and the perceptions of their immediate followers (Lin, Dang and Liu 2016; Su et al., 2019). Furthermore, the existing research conducted among

transformational chief executive officers (CEOs) examines their direct relationships with higher-level manager and improvements in organisational performance (Su et al., 2019). As a result, there is currently a limited number of studies exploring the relationship between CEOs' leadership style and attitudinal or behavioural outcomes among employees who do not report directly to them (Ou et al., 2014). One such study conducted by Xi, Zhao, and Xu (2017) demonstrated that relationship-focused CEO behaviours, such as relating and communicating with employees as well as showing them benevolence and care, improved the positive attitudes of operational-level employees. Additionally, Peng and colleagues (2016) showed that the extent to which CEOs promote and support critical thinking and problem-solving (i.e., intellectual stimulation), significantly enhances work meaningfulness in employees at lower hierarchical levels of organisations. The present study aims to add to this body of research by exploring the role of belongingness in the relationship between CEO leadership behaviours and important employee outcomes at various organisational levels (Peng et al., 2016; Wang, Tsui, & Xin, 2011).

It has been argued that only followers who report directly to the CEO are exposed to their leadership behaviours, hence why extant research has neglected examine the impact CEOs have on the general employee population (Wang et al., 2011). However, employees throughout the hierarchy of an organisation perform various tasks and play a pivotal role in organisational performance (Xi et al., 2017). Even if they do not work closely with the CEO, employees form an impression of their CEO based on key strategic decisions and how they are communicated, public engagements where the CEO has been visible, and the organisation's culture (Peng et al., 2016). Together, this information shapes employee perceptions of the CEO that may influence their work-related attitudes and behaviours. The CEO's influence on employees can either be direct or indirect. The indirect mechanism entails a cascading effect, wherein the leadership behaviours of the CEO influence their direct executive followers, who then



progressively trickle down the same style of leadership to employees at different levels of the organisation (Bass, Waldman, Avolio, & Bebb, 1987; Boehm, Dwertmann, Bruch, & Shamir, 2015). The direct mechanism consists of the impression the general workforce has of their CEO, based on organisational cues, observation, or close interactions (Vera & Crossan, 2004).

The present study is primarily interested in the behaviours within the idealised influence and intellectual stimulation dimensions of transformational leadership. As the present study will seek participants from the general workforce, it was determined to focus on the CEO behaviours which employees would be more likely to experience. It would be highly unlikely that a CEO of an organisation provides individualised consideration to all employees. Likewise, it would be improbable that individual employees would receive inspirational motivation from their CEO, in that the CEO confers meaning to the specific work they do, sets high standards, as well as provides support to achieve work-related goals. Hence, the present study tests the relationship between idealised influence and intellectual stimulation from the CEO and employees' positive experiences and behaviours at work, namely well-being and OCB.

### **Transformational Leadership and Well-Being**

Well-being is a broad and complex construct that has been conceptualised in various ways in the literature, conceptualisations which include one's general satisfaction with their life as well as their physical and psychological functioning (Ryan & Deci, 2001). The literature further reports that well-being can be differentiated into two different components; hedonic and eudaimonic (Culbertson, Fullagar, & Mills, 2010; Ryan & Deci, 2001). The hedonic component focuses on the extent to which one experiences feelings of happiness. The eudaimonic component on the other hand refers to an individual functioning at an optimal level and is often regarded as *psychological well-being* (Ryff & Keyes, 1995). In the present study

both components are measured because the primary focus is on employee mental well-being, which can be referred to as one's subjective evaluation regarding the extent to which they feel good and function well (Fat, Scholes, Boniface, Mindell, & Stewart-Brown, 2017; Ryan & Deci, 2001).

Organisations have increased their interest in employee well-being, as positive mental well-being has been associated with several beneficial outcomes for employees as well as organisations. For example, employees with higher levels of well-being are more likely to perform their job well, be satisfied with their job, and conversely, be less likely to voluntarily leave their job and engage in chronic absenteeism (Wright & Cropanzano, 1998; Wright & Cropanzano, 2000; Verhaeghe, Vlerick, Gemmel, Maele, & Backer, 2006).

Several studies have demonstrated the relationship between transformational leadership and positive employee well-being (e.g., Arnold et al., 2007; Densten, 2005; Liu, Siu, & Shi, 2009). Moreover, training leaders to develop transformational leadership skills has been recommended as an intervention to decrease employee stress and enhance well-being (Kelloway & Barling, 2010). The job demands-resources model is the framework commonly used to explain the effect of transformational leadership on employee well-being (Arnold, 2017; Bakker & Demerouti, 2007; Demerouti, Bakker, Nachreiner, & Schaufeli, 2001). The behaviours exhibited by a transformational leader serve to enhance their followers' personal and job resources (e.g., self-efficacy, social support) and/or decrease their job demands (e.g., perceived time pressure), thus, having a positive impact on followers' well-being (Pillai & Williams, 2004; Sivanathan, Arnold, Turner, & Barling, 2012; Syrek, Apostel, & Antoni, 2013). Specifically, idealised influence places an importance on acting as a collective, which in turn may reduce feelings of loneliness and increase employees' sense of connectedness (Sosik & Godshalk, 2000). Intellectual stimulation on the other hand challenges employees to think more creatively and for themselves, as opposed to looking to their superiors for all the

answers. This in turn may enhance employees' confidence and self-efficacy (Sivanathan et al., 2012).

**Hypothesis 1a.** Idealised influence from the CEO will be positively and significantly associated with employee well-being.

**Hypothesis 1b.** Intellectual stimulation from the CEO will be positively and significantly associated with employee well-being.

### **Transformational Leadership and OCBs**

Organisational Citizenship Behaviours (OCBs) are extra-role behaviours performed by individuals which ultimately benefit the organisation and other organisational members (Chahal & Mehta, 2010; Podsakoff et al., 1990). Extra-role behaviours are described as those which are not an obligatory role requirement (Podsakoff, et al., 2000), and are “not directly or explicitly recognised by the formal reward system” (Organ, 1998, p. 4). Ultimately, OCBs are behaviours which an employee may perform of their own volition, and the decision to not perform such behaviours cannot be met with punitive action (Podsakoff et al., 2000). In the literature, OCBs have frequently been stated as the most important contextual behaviours, and shown positive associations with organisational performance, a positive social climate, as well as other positive organisational outcomes such as reduced employee turnover, reduced absenteeism, and increased employee job satisfaction (Chahal & Mehta, 2010; Podsakoff, Whiting, Podsakoff, & Blume, 2009; Wang, Lu, & Siu, 2015). Employees performing OCBs has been related to beneficial outcomes at the individual- and group-level, as well as the organisational-level. Research has demonstrated that OCBs are associated with organisational effectiveness and serve as a good indicator of organisational performance (Kyei-Poku, 2014; Podsakoff et al., 2009; Podsakoff et al., 2000).

While there are numerous ways in which OCBs have been conceptualised (see Lee & Allen, 2002; Williams & Anderson, 1991), one of the most prevalent conceptualisations is that proposed by Organ (1988, 1990). Organ posited a five-dimension model of OCB which consists of: conscientiousness, civic virtue, sportsmanship, altruism, and courtesy. The dimensions of conscientiousness, civic virtue, and sportsmanship are considered behaviours which are directed towards the organisation, whereas altruism and courtesy are behaviours which are directed towards other individuals within the workplace (Hoffman, Blair, Meriac, & Woehr, 2007; Williams & Anderson, 1991). Given that the present study focuses on perceptions of being valued, respected, and included by others as core components of belonging at work, the other-oriented behaviours pertaining to altruism and courtesy will be examined as the primary dimensions of interest.

Altruism refers to the helping behaviours performed by an employee which are directed towards other individuals in the organisation, such as assisting new employees with their tasks, or helping out colleagues who have heavy workloads (Chahal & Mehta, 2010; Organ, 1988). Courtesy involves an employee informing or consulting with their colleagues in order to prevent work-related issues arising, e.g., actively taking steps to avoid workplace conflicts from escalating (Babcock-Roberson & Strickland, 2010; Chahal & Mehta, 2010; Kyei-Poku, 2014). While both dimensions entail helping behaviours, courtesy can be considered as “taking steps in advance” to help prevent issues from occurring, whereas altruism is assisting someone “who already has a problem” (Organ, 1988, p. 12; Podsakoff et al., 1990).

Altruistic actions have been deemed to be the most important OCB dimension because in order to perform these actions an employee needs to be aware of the dynamics of their workplace, which, consequently, is reflective of the level of interest one has in their workplace environment (Ocampo et al., 2018; Paré & Tremblay, 2007). Moreover, employees engaging in OCBs can help enhance customer satisfaction. For example, when tasks require employees

to work cooperatively and collaboratively within their workgroup, engaging in OCBs can be perceived as employees attempting to exceed expectations of the customer, which in turn reflects positively upon the organisation (Ocampo et al., 2018). Other notable beneficial organisational outcomes that are commonly associated with OCBs include decreased turnover rates, increased efficiency, productivity, and adaptability (Bolino, Turnley, Gilstrap, & Suazo, 2009; Podsakoff et al., 2009).

At the individual level, those who engage in OCB have been shown to receive more positive performance evaluations and rewards (Podsakoff et al., 2000; Van Scotter, Motowidlo, & Cross, 2000). Employees who perform OCB also experience positive affectivity stemming from perceptions of having a positive impact on others and the gratitude they in turn convey (Grant & Sonnentag, 2010). At the group level, OCBs help decrease interpersonal tensions amongst members (Nielsen, Bachrach, Sundstrom, & Halfhill, 2012), promote knowledge sharing behaviours (Hsien, Pei, Yung, & Sheng, 2014), and improve social cohesiveness, a concept which has been demonstrated to predict group performance (Halbesleben & Wheeler, 2015; Sundstrom, McIntyre, Halfhill, & Richards, 2000).

There is an abundance of empirical evidence demonstrating the positive association between transformational leadership and follower OCBs (Wang et al., 2011). Transformational leaders motivate and inspire their followers to perform above and beyond the requirements in their job descriptions, and highlight the value of cooperative and learning behaviours (Bass & Avolio, 1994), which in turn encourages them to engage in OCBs (Shamir, House, & Arthur, 1993).

**Hypothesis 2a.** Idealised influence from the CEO will be positively and significantly associated with OCB-altruism.

**Hypothesis 2b.** Intellectual stimulation from the CEO will be positively and significantly associated with OCB-altruism.

**Hypothesis 3a.** Idealised influence from the CEO will be positively and significantly associated with OCB-courtesy.

**Hypothesis 3b.** Intellectual stimulation from the CEO will be positively and significantly associated with OCB-courtesy.

### **Transformational Leadership and Belongingness**

Empirical research exploring whether transformational leadership behaviours engender a sense of belonging within followers is currently lacking. The limited amount of research available suggests that transformational leaders enhance group cohesion. That is, when transformational leadership is high, followers have more confidence the other members of their team and believed that they would support each other when necessary (Jung & Sosik, 2002).

Transformational leadership has also been shown to be associated with organisational identification, a construct which encompasses the notion of belongingness (Morian, Molero, Topa, & Lévy Mangin, 2014; Zhu, Sosik, Riggio, & Yang, 2012). Organisational identification refers to an individual's perception of oneness with their organisation, wherein they internalise the values and goals of their organisation and experience its successes and failures as their own (Ashforth & Mael, 1989; Chung et al., 2019). Items used to measure organisational identification include: *I feel proud to work for this organisation* (Epitropaki & Martin, 2005; Smidts, Pruyn, & Van Riel, 2001); *I feel strong ties with my organisation* (Mael & Ashforth, 1992; Schuh et al., 2012); *I feel myself to be a part of the organisation* (Martin & Epitropaki, 2001); and *to what extent does your own sense of who you are (i.e., your personal identity) overlap with your sense of what your company represents* (Wang, Demerouti, & Le Blanc, 2017).

Belongingness, on the other hand, is concerned more so with the quality of the relationships one forms with those in their work environment (i.e., feelings of acceptance,

support, respect) (Baumesiter & Leary, 1995; Cockshaw & Shochet, 2010; Shore et al., 2011). There is currently no research which conceptualises and explores the construct of workplace belongingness in relation to transformational leadership. This study aims to contribute to this body of evidence and examine the relationship between employees' perceptions of a CEO's transformational leadership, and their sense of belonging at work.

**Hypothesis 4a.** Idealised influence from the CEO will be positively and significantly associated with followers' sense of workplace belongingness.

**Hypothesis 4b.** Intellectual stimulation from the CEO will be positively and significantly associated with followers' sense of workplace belongingness.

### **The Mediating Role of Belongingness**

A sense of workplace belongingness may be an important underlying psychological mechanism that explains the relationship between transformational leadership behaviours and employee well-being and OCB. For example, through idealised influence, leaders emphasise the importance of achieving organisational goals, which in turn may enhance employees' feelings of being part of a collective. Similarly, through intellectual stimulation, leaders encourage their employees to think creatively and be involved in decision making, which in turn may be associated with a supportive organisational culture (Bass, 1990, 1999).

As discussed earlier, transformational leadership has consistently been demonstrated to be positively associated with employee well-being. This relationship between transformational leadership and employee well-being has commonly been found to be mediated by psychological variables such as efficacy beliefs, perceptions of meaningful work (Nielsen & Daniels, 2012; Perko, Kinnunen, & Feldt, 2014), trust in the leader (Kelloway et al., 2012; Liu et al., 2009), and need satisfaction (Stenling & Tafvelin, 2014). The present study will test the mediating effect of belongingness on the relationship between transformational leadership and

well-being. The transformational behaviours exhibited by leaders are expected to create a supportive work environment where employees feel like a valued and respected member of a collective, which in turn may positively impact employee well-being. Workplace-specific belongingness has been found to have a strong negative association with depressive symptoms within employees (Cockshaw, Shochet, & Obst, 2014; Cockshaw & Shochet, 2010). Workplace belongingness has also been demonstrated to serve as a protective factor that helps to mitigate the effects of organisational stressors, which in turn has a positive impact on employee well-being (Armstrong, Shakespeare-Finch, & Shochet, 2014). A more recent study conducted by Shakespeare-Finch and Daley (2017) provided further support for this relationship. Their results suggest that workplace belongingness has a significant relationship with enhanced resilience levels and decreased levels of distress.

With regard to general belongingness, several empirical studies have explored the link between belongingness and mental health outcomes (Cockshaw et al., 2013). There is substantial evidence that a lack of belongingness is associated with poor mental health and depressive symptoms in particular (McLaren, Gomez, Bailey, & Van Der Horst, 2007; Van Orden, Witte, Gordon, Bender, & Joiner, 2008; Vanderhorst & McLaren, 2005). The results of these studies are in line with the *belongingness hypothesis* proposed by Baumeister and Leary (1995), wherein belongingness is a human need and if one perceives this need to be unfulfilled, it will likely be associated with negative affectivity. The sociometer theory has more recently been proposed by Leary and Baumeister (2000) as an extension of the belongingness hypothesis. This theory states that individuals possess an innate mechanism (the sociometer) through which they constantly monitor interpersonal signals that aid them in developing an overall impression of their relation value (i.e., the extent to which they are accepted or rejected) (Leary & Baumeister, 2000). When one perceives their relation value to be low, it can be associated with low self-esteem, which is a significant element of depressive symptoms



(Cockshaw & Shochet, 2010; Leary & Baumeister, 2000). Further documented detrimental mental and physical health outcomes that have been associated with thwarted belongingness include poor sleep quality, high blood pressure, maladaptive health-related behaviours, as well as poor self-reported health (Baumeister, DeWall, Ciarocco, & Twenge, 2005; Blackhart, Nelson, Knowles, & Baumeister, 2009; Cacioppo, Cacioppo, Capitanio, & Cole, 2015; Eisenberger, 2013; Wolf & Davis, 2014).

**Hypothesis 5a.** A sense of workplace belongingness will mediate the positive relationship between idealised influence and well-being.

**Hypothesis 5b.** A sense of workplace belongingness will mediate the positive relationship between intellectual stimulation and well-being.

The present study posits that transformational leader behaviours may motivate employees to engage in OCBs by enhancing a sense of belongingness. There has been empirical research conducted which supports the proposed association. For instance, a sense of group belongingness has also been shown to mediate the relationship between charisma, the idealised influence component of transformational leadership, and cooperative behaviours (De Cremer & Van Knippenberg, 2002). By articulating an appealing vision of the future and emphasising the importance of collective goals and objectives over that of the individual, charismatic leaders enhance their followers' sense of inclusion and identity relative to their work group, which in turn elicits citizenship behaviours such as cooperation (De Cremer & Van Knippenberg, 2002; Shamir et al., 2003). Of interest to the present study, altruism and courtesy behaviours may stem from the perceived value and importance of maintaining positive interactions, of ensuring social cohesion, and of supporting each other's development and contributions to the organisation; i.e., from a sense of belonging. For example, in a sample of 213 Dutch employees, Thau, Aquino, and Poortvliet (2007) identified that when employees experience a thwarted

sense of belonging regarding their co-workers, they exhibited lower levels of helpful interpersonal behaviours and higher levels of harmful interpersonal behaviours towards their co-workers. Other researchers have similarly provided evidence documenting the importance of the role belongingness plays in facilitating employee OCB (see Den Hartog et al., 2007; Kyei-Poku, 2014).

One performs prosocial behaviours not to benefit themselves, but for the benefit of other individuals (Twenge, Baumeister, DeWall, Ciarocco, & Bartels, 2007). Behaviours that are considered prosocial, such as cooperating with and helping others, are dependent on the notion that one belongs to a community of people who help, support, and respect one another (Twenge et al., 2007). Consequently, when individuals perceive themselves to be socially excluded or not belonging to a particular group, their propensity to perform prosocial behaviours significantly decreases. In a similar vein, studies using a laboratory experimental design have demonstrated that when individuals' need for belongingness is satisfied, their engagement in prosocial behaviours, such as volunteering and donating to charity, significantly increase, while their aggressive tendencies significantly decrease (Pavey, Greitemeyer, & Sparks, 2011; Twenge, Baumeister, Tice, & Stucke, 2001; Twenge et al., 2007; Weinstein & Ryan, 2010). A sense of belonging has been noted to be particularly important in promoting the aforementioned outcomes because of the increased levels of trust, empathy, and connectedness one feels towards others who help satisfy their need to belong (Pavey et al., 2011; Twenge et al., 2007). The present study proposes that transformational leaders emphasise supportive behaviours and promote a work environment where collaboration and networking are valued. Such leader behaviours contribute to a higher sense of belonging, and in turn, behaviours aimed at maintaining that sense through prosocial behaviours. Hence, the following is hypothesized:

**Hypothesis 6a.** A sense of workplace belongingness will mediate the positive relationship between idealised influence from the CEO and OCB-altruism.

**Hypothesis 6b.** A sense of workplace belongingness will mediate the positive relationship between intellectual stimulation from the CEO and OCB-altruism.

**Hypothesis 7a.** A sense of workplace belongingness will mediate the positive relationship between idealised influence from the CEO and OCB-courtesy.

**Hypothesis 7b.** A sense of workplace belongingness will mediate the positive relationship between intellectual stimulation from the CEO and OCB-courtesy.

## **Method**

### **Participants**

In order to participate in this study, participants needed to be over 18 years old and in full-time employment in a white-collar service industry job. No participants were excluded on the basis of gender, ethnicity, or other biodemographic variable. The participants for this study consisted of 52 female and 42 male employees. Participants' tenure ranged between less than a year to 22 years with a mean tenure of 4.82 years ( $SD = 4.68$ ). 69 participants worked in New Zealand while 25 stated they worked internationally. In regard to sector, 44 participants worked in the private sector, 35 in the public sector, and 15 specified their sector as "other". The participants in this sample worked in a variety of industries, with the most common being legal, local government, and social enterprise.

### **Procedure**

In this cross-sectional study, self-report data was collected from participants via an online survey administered at a single time point. Participants were made aware that the survey was anonymous. Eligible participants within the researcher's network were contacted to request

their participation in this study. As a form of snowball recruitment, these participants were asked to forward the details of this study onto their colleagues who are eligible and wish to participate. The researcher also contacted senior Human Resources staff members from a range of different organisations to discuss the study. Upon agreeing (via email) that their respective organisation was willing to participate in the study, the researcher sent them a recruitment email (Appendix A) with the project information and consent sheet attached (Appendix B). The information and consent sheet provided participants with additional information about the study, including the purpose of the research and how their data would be treated and protected. Furthermore, participants were also informed that the study had been approved by the University of Canterbury Human Ethics Committee. This recruitment email was then circulated to the organisation's employees via the HR contact. The link to the Qualtrics survey was included in said recruitment email. If employees decided to participate, they clicked the attached link and began the survey. Participants were advised that this survey would take approximately 15 minutes to complete. The survey link was kept active for 8 weeks to ensure there was sufficient time to recruit participants. Participating organisations received one reminder email two weeks from the date they consented to partake in the study.

Participation in this study was voluntary and employee participation was incentivised by the opportunity to go into the draw to win one of five \$100 Westfield shopping vouchers once the questionnaire had been completed and submitted. To protect the identity of the participants, employee information for the prize draw was collected on a separate webpage to the online questionnaire. This personal information was only used for the distribution of prizes and was destroyed once the study had been completed.

## Measures

**Transformational leadership.** Follower perceptions of transformational leadership were measured using the Multifactor Leadership Questionnaire (MLQ 5x Short Form; Bass & Avolio, 2004). For the purposes of this study, only the two transformational leadership dimensions of interest were used (i.e., *idealised influence* and *intellectual stimulation*), while the Transactional and Passive-Avoidant dimensions were excluded. This scale uses a 5-point Likert-type response scale format (from 1 = “never” to 5 = “very often, almost always”). The MLQ 5x Short Form has been found to have good internal consistency, ranging from .63 to .92, with the majority reporting greater than .80 (see Bass & Avolio, 1990; 2004). A sample item for the idealised influence subscale is “My CEO specifies the importance of having a strong sense of purpose.” A sample item for the intellectual stimulation subscale is “My CEO gets me to look at problems from many different angles.”

**Workplace belongingness.** The Psychological Sense of Organisational Membership Scale (PSOM; Cockshaw & Shochet, 2010) was used to measure a sense of belonging within the workplace. The PSOM is an 18-item scale which uses a 5-point Likert-type response scale format (from 1 = “not at all” to 5 = “completely true”). A sample item is “I feel like a real part of this organisation.” This scale has been shown to have good internal consistency ( $\alpha = .94$ ).

**Well-being.** Well-being was measured using the 7-item Short Warwick-Edinburgh Mental Wellbeing Scale (SWEMWBS; Stewart-Brown et al., 2009). This scale uses a 5-point Likert-type response scale format (from 1 = “none of the time” to 5 = “all of the time”). A sample item is “I’ve been dealing with problems well.” This scale has been used widely and has shown good internal consistency ( $\alpha = .89$ ) (Stewart-Brown et al., 2009; Tennant et al., 2007).

**Organisational citizenship behaviours.** To measure prosocial workplace behaviours, this study used the *altruism* and *courtesy* subscales from the Organisational Citizenship

Behaviour Scale (OCB-Scale) developed by Podsakoff, MacKenzie, Moorman, and Fetter (1990). The five OCB-altruism and five OCB-courtesy items pertain to prosocial behaviours one exhibits towards other individuals at work. A sample item for the altruism dimension is “I help others who have heavy workloads” and a sample item for the courtesy dimension is “I try to avoid creating problems for co-workers.” The subscales have been shown to have good internal consistency with coefficient alpha values ranging from .67 to .91 for altruism, and .69 to .86 for courtesy (Lam, Hui, & Law, 1999; Pillai, Schriesheim, & Williams, 1999).

### **Data Analysis**

All data was statistically analysed using IBM SPSS (version 25). Firstly, the descriptive statistics were analysed to evaluate the sample, including the sample size as well as demographic information such as age, gender, and job-level. Following this, exploratory factor analyses were conducted to identify the underlying structure of the different variables measured. Reliability analyses for each scale were then conducted to obtain measures of internal consistency. Furthermore, bivariate correlations were conducted for a preliminary examination of the associations between all variables of interest. Lastly, The PROCESS Macro for SPSS was used to test the hypotheses, main effects, and indirect effects.

## **Results**

### **Preliminary Data Analysis**

Prior to testing the hypotheses, the underlying dimension structures of each scale used in this study were first assessed. Principal component analysis with varimax rotation using Kaiser Normalisation was used to establish the dimensionality of the MLQ idealised influence and intellectual stimulation subscales and the OCB scale along the two dimensions measured. To establish the unidimensional structure of the PSOM and SWEMWB scales, principal axis

factoring with direct oblimin rotation using Kaiser Normalisation was utilised. For relevant factor analysis information (rotated factor loadings, communalities, eigenvalues, and percentage of variance) of each scale see Tables D1 to D7 in Appendix D. The eigenvalue cut-off criteria used was greater than one (Hinkin, Tracey & Enz, 1997; Kaiser, 1960). Furthermore, the only items that were retained were ones that had component loadings greater than or equal to .40 on one component and less than .40 on the other components (DeVellis, 2017; Hinkin et al., 1997).

There have been extensive validation studies conducted for the MLQ 5x Short Form which have consistently demonstrated that idealised influence and intellectual stimulation are two distinct dimensions of transformational leadership (see Antonakis, Avolio, & Sivasubramaniam, 2003; Avolio, Bass, & Jung, 1999). However, the MLQ 5x Short Form items pertaining to the dimensions of idealised influence and intellectual stimulation loaded on one factor instead of two (Appendix D, Table D1). This phenomenon has been observed in the literature and researchers have suggested that such high intercorrelations are not uncommon because the transformational leadership dimensions are conceptually related and in turn may overlap (Bommer, Rich, & Rubin, 2005). Hence, a decision was made to retain idealised influence and intellectual stimulation as separate scales.

The underlying factor structure of the PSOM scale was then examined. The results of this analysis are shown in Appendix D, Table D2. The PSOM scale has previously been demonstrated to have a single factor structure (see Cockshaw & Shochet, 2010; Cockshaw, Shochet, & Obst, 2013). However, the initial analysis revealed an unexpected four-factor structure. Another analysis was then conducted excluding the negatively-worded items in the PSOM scale as the initial analysis indicated that these items may be measuring a construct other than workplace belongingness (e.g., perceived isolation or exclusion). Previous researchers have also acknowledged this issue when negatively-worded items are used in an

attempt to capture one construct, but ultimately end up capturing a different construct than the positively-worded items within the same scale (see Kam & Fan, 2018; Podsakoff, MacKenzie & Podsakoff, 2012). The new factor analysis excluding the negatively-worded items revealed a two-factor structure with all factor loadings above .4 (Appendix D, Table D3). However, a decision was made to combine these factors into a composite variable as they were highly correlated (.73), and their content did not seem to reflect unique facets of belongingness.

A principal component analysis was then conducted to test the underlying component structure of the OCB scale (Appendix D, Table D4). The OCB items pertaining to the altruism and courtesy dimensions loaded, as expected, on two components. Upon examining the OCB factor structure, the altruism item “I help orient new people even though it is not required” loaded on both the altruism component as well as the courtesy component. Due to this item cross-loading, it was removed from further analysis. The courtesy items and the remaining altruism items were retained as the items had component loadings above the suggested value of .4.

Lastly, a factor analysis was conducted to identify the underlying structure of the SWEMWB scale. The results of this analysis are displayed in Appendix D, Table D5. As expected, a single factor solution was obtained with all factor loadings above .4.

### **Descriptive Statistics and Correlation Coefficients**

Composite indices were created for each of the aforementioned measures by calculating the average response ratings for each scale. The means, standard deviations, bivariate correlations, and Cronbach’s alpha values were calculated and are displayed in Table 1.



Table 1

*Summary of Descriptive Statistics, Correlations, and Internal Consistency for all Variables.*

	M	SD	1	2	3	4	5	6
1. Idealised Influence	3.55	.98	(.92)					
2. Intellectual Simulation	3.08	1.00	.82**	(.87)				
3. Belonging	3.83	.79	.61**	.55**	(.93)			
4. Altruism (OCB)	4.24	.76	.34**	.34**	.39**	(.89)		
5. Courtesy (OCB)	4.50	.51	.09	.03	.34**	.63**	(.83)	
6. Well-Being	3.58	.71	.52**	.54**	.55**	.41**	.33**	(.85)
7. Tenure	4.82	4.68	-.13	-.08	.05	.02	.16	.04

Note. \*  $p < .05$ , \*\*  $p < .01$  (two-tailed). Cronbach's alpha values ( $\alpha$ ) are displayed on the diagonal.

Idealised influence was significantly and positively associated with workplace belonging, well-being, as well as the altruism dimension of OCB ( $r = .61, p < .01$ ;  $r = .52, p < .01$ ;  $r = .34, p < .01$ , respectively). No significant correlation was found between idealised influence and the courtesy dimension of OCB ( $r = .09, p > .05$ ). Intellectual stimulation was also significantly and positively associated with workplace belonging, well-being, and the altruism dimension of OCB ( $r = .55, p < .01$ ;  $r = .54, p < .01$ ;  $r = .34, p < .01$ , respectively). As with idealised influence, intellectual stimulation was not significantly associated with the courtesy dimension of OCB ( $r = .03, p > .05$ ). Notably, idealised influence and intellectual stimulation were significantly and positively associated ( $r = .82, p < .01$ ). The present study posits that transformational CEOs homogenously perform behaviours pertaining to both dimensions (i.e., leaders who exhibit idealised influence concurrently exhibit intellectual stimulation) (Lievens Pascal Van Geit Pol Coetsier, 1997).

Belonging was significantly and positively associated with well-being and both the altruism and courtesy dimensions of OCB ( $r = .55, p < .01$ ;  $r = .39, p < .01$ ;  $r = .34, p < .01$ , respectively).

With respect to demographic variables, tenure was not significantly associated with either the predictor or outcome variables. Furthermore, an independent samples  $t$ -test was conducted to determine if there were any significant differences between males and females

along the variables of interest (see Appendix E, Table E1). The independent samples *t*-test shows that mean levels of OCB-altruism for males ( $M = 4.05$ ,  $SD = .79$ ) were significantly lower ( $t = -2.18$ ,  $p < .05$ ) than females' ( $M = 4.39$ ,  $SD = .70$ ). Mean levels of OCB-courtesy for males ( $M = 4.37$ ,  $SD = .61$ ) were also significantly lower ( $t = -2.33$ ,  $p < .05$ ) than females' ( $M = 4.62$ ,  $SD = .39$ ). Previous OCB researchers have acknowledged this phenomenon and offer gender-based differences as a possible explanation (Kacmar et al., 2011). It has been suggested that women perform OCB as a means of forming relationships and easing social tensions, whereas males offer OCB as a means of garnering favour at work (Hackett et al., 2018). In line with this rationale, it is unsurprising that females exhibited more OCB given that the nature of the OCB dimensions examined in this study pertain to prosocial behaviours. Lastly, there were no significant differences between males and females for the predictor variables (idealised influence, intellectual stimulation, and belonging).

### **Hypothesis Testing**

The PROCESS Macro (Model 4) for SPSS by Hayes (2013) was used to conduct hypothesis testing. PROCESS Macro runs a bootstrap procedure with 5000 resamples. A significant indirect effect is considered to have occurred if the 95% confidence interval does not include zero.

**Direct Effects.** Table 3 shows that idealised influence did not have a significant direct effect on well-being  $[(.04, CI = -.19, .27)]$ , OCB-altruism  $[(.02, CI = -.26, .31)]$ , nor OCB-courtesy  $[(.01, CI = -.19, .21)]$ . Similarly, intellectual stimulation did not have a significant direct effect on well-being  $[(.12, CI = -.02, .41)]$ , OCB-altruism  $[(.10, CI = -.16, .36)]$ , nor OCB-courtesy  $[(-.14, CI = -.33, .04)]$ . In summary, the results did not provide support for the hypotheses which predicted that the transformational leadership dimensions would be

positively and significantly associated with employee well-being, OCB-altruism, and OCB-courtesy (i.e., Hypotheses 1a, 1b, 2a, 2b, 3a, or 3b).

Table 3 also shows that the extent to which a CEO exhibited idealised influence significantly explained the experience of workplace belongingness within the employees sampled  $[(.40, CI = .15, .64)]$ . This significant and positive direct effect provides support for Hypothesis 4a which predicted idealised influence would be significantly and positively associated with workplace belongingness. Intellectual stimulation was not significantly associated with workplace belongingness, hence, Hypothesis 4b was not supported.

When workplace belonging was included in the model with idealised influence and intellectual stimulation, workplace belongingness significantly explained employees' self-reported well-being  $[(.34, CI = .15, .54)]$ , OCB-altruism  $[(.29, CI = .05, .53)]$ , and OCB-courtesy  $[(.31, CI = .15, .47)]$ . Interestingly, within this model, intellectual stimulation explained the variance in employee well-being significantly at the  $p < .10$  significance level  $[(.20, CI = -.02, .41)]$ .

In summary, idealised influence was positively associated with belongingness; neither of the MLQ dimensions were directly associated with the outcomes of interest; and lastly, workplace belongingness was positively and significantly associated with all the outcomes of interest.

**Indirect effects.** Table 3 also shows the paths from each MLQ dimension to the outcome variables through workplace belongingness, controlling for the other MLQ dimension. 95% confidence intervals not containing zero indicate significant indirect effects. The findings show that CEO idealised influence provided employees with a sense of belonging at work, which in turn positively influenced employee well-being  $[(.14, CI = .03, .30)]$ , OCB-altruism  $[(.12, CI = .00, .28)]$ , and OCB-courtesy  $[(.12, CI = .02, .27)]$ . Therefore, Hypotheses

5a, 6a, and 7a, concerning the indirect effect of CEO idealised influence on the outcomes of interest via an enhanced sense of belongingness, were supported.

Conversely, the paths from intellectual stimulation to well-being [(0.04, CI = -.05, .15)], OCB-altruism [(0.04, CI = -.04, .15)], and OCB-courtesy [(0.04, CI = -.04, .14)] through workplace belongingness were not statistically significant (see Table 3). Hence, Hypotheses 5b, 6b, and 7b were not supported. Overall, idealised influence was shown to be more significant in fostering a sense of belonging within employees, which in turn was positively associated with employee well-being and OCB.

Table 3

*Results of Bootstrapped Mediation Analyses examining the effect of idealised influence, intellectual stimulation, workplace belonging, well-being, OCB-altruism, and OCB-courtesy.*

Path	$\beta$	SE	CI
<i>Direct Relationships</i>			
Idealised Influence → Belonging (a1)	.40**	.12	(.15, .64)
Intellectual Stimulation → Belonging (a2)	.12	.12	(-.12, .36)
Belonging → Well-Being (b1)	.34**	.10	(.15, .54)
Belonging → Altruism (b2)	.29†	.12	(.05, .53)
Belonging → Courtesy (b3)	.31**	.08	(.15, .47)
Idealised Influence → Well-Being (c1.1)	.04	.12	(-.19, .27)
Idealised Influence → Altruism (c1.2)	.02	.14	(-.26, .31)
Idealised Influence → Courtesy (c1.3)	.01	.10	(-.19, .21)
Intellectual Stimulation → Well-Being (c2.1)	.12	.11	(-.02, .41)
Intellectual Stimulation → Altruism (c2.2)	.10	.13	(-.16, .36)
Intellectual Stimulation → Courtesy (c2.3)	-.14	.09	(-.33, .04)
<i>Indirect Relationships</i>			
Idealised Influence → Belonging → Well-Being (c1.1')	.14†	.07	(.03, .30)
Idealised Influence → Belonging → Altruism (c1.2')	.12†	.07	(.00, .28)
Idealised Influence → Belonging → Courtesy (c1.3')	.12†	.06	(.02, .27)
Intellectual Stimulation → Belonging → Well-Being (c2.1')	.04	.05	(-.05, .15)
Intellectual Stimulation → Belonging → Altruism (c2.2')	.04	.05	(-.04, .15)
Intellectual Stimulation → Belonging → Courtesy (c2.3')	.04	.04	(-.04, .14)

Note. †  $p < .10$ , \*\*  $p < .05$  (two-tailed).

## **Discussion**

The aim of the current study was to examine whether a sense of workplace belongingness mediated the relationship between the idealised influence and intellectual stimulation dimensions of transformational leadership, and employee well-being and OCB. A self-report questionnaire was administered to white-collar service industry employees living in New Zealand and abroad. This study is one of the few which examines the construct of workplace belongingness, as well as one of the only studies to examine potential antecedents of workplace belongingness.

Surprisingly, in the present study neither idealised influence nor intellectual stimulation were directly associated with employee well-being, OCB-altruism nor OCB-courtesy. These findings are contrary to previous cross-sectional studies which demonstrated transformational leadership to be directly, significantly, and positively associated with employee well-being (Arnold, 2017) and OCB (Khalili, 2017; MacKenzie, et al., 2001; Wang et al., 2011). One potential explanation for the absence of a direct effect between the transformational leadership dimensions and employee well-being in this study could be the fact that the analyses pertained to individual dimensions of transformational leadership. The majority of past studies use a composite of all four transformational leadership subscales to form one aggregated transformational leadership variable, as opposed to examining the effects of the individual dimensions (see Arnold, 2017).

There have been a small number of studies which investigated the role of individual transformational leadership dimensions in predicting employee well-being, in particular, burnout and strain. For example, one cross-sectional study demonstrated the individual consideration, inspirational motivation, and idealised influence dimensions to be significantly and negatively related to the emotional exhaustion dimension of burnout (Corrigan, Diwan, Campion, & Rashid, 2002). In the same study, intellectual stimulation was not significantly

associated with emotional exhaustion. Franke and Felfe (2011) conducted a cross-sectional study using a German sample and identified that idealised influence and individual consideration were significantly and negatively associated with strain after controlling for intellectual stimulation and inspirational motivation. Notably, the present study used a measure of subjective well-being, a construct that is conceptually different from burnout and strain (constructs which capture symptoms of ill health) (Tafvelin et al., 2011). The mixed results of the aforementioned studies in conjunction to the findings of the present study suggest further investigation is required to explore whether and how individual dimensions of transformational leadership uniquely influence facets of employee well-being.

In a similar vein, the literature exploring transformational leadership and employee OCB also consist of analyses using an aggregate of the four individual transformational leadership dimensions (MacKenzie et al. 2001). Hence, the dimensions which were not examined in the present study (individual consideration and inspirational motivation) may be the dimensions driving the direct relationship between transformational leadership and OCB. For example, transformational leaders serve as role models who provide individualised consideration by attending to the needs and goals of each of their followers, and in turn, said followers may be more likely to reciprocate their leader's treatment and emphasis on positive interpersonal relations by way of OCBs (Wang et al., 2011).

The idealised influence dimension of transformational leadership had a significant positive relationship with workplace belonging when controlling for intellectual stimulation. This aligns with research pertaining to leaders who exhibit charisma, a concept synonymous with idealised influence, wherein doing so they engender feelings of belongingness within their followers (De Cremer & Van Knippenberg, 2002; Den Hartog et al., 2007). This finding is not surprising given that through idealised influence, leaders place an emphasis on the importance of achieving collective goals (Bass, 1990, 1999), which in turn may contribute to creating a

workplace environment which helps foster a sense of belonging within employees. Furthermore, the results of the current study could encourage future qualitative research to investigate which specific behaviours within the idealised influence dimension play a more significant role in enhancing employees' sense of workplace belonging.

The results of this study also contribute to the belongingness literature. The results indicate that a sense of workplace belongingness is positively associated with employees experiencing well-being as well as exhibiting altruistic and courteous OCB. This is consistent with previous research findings which state that perceptions of being personally valued, accepted, and supported by others is be beneficial to one's health (e.g., Baumeister et al., 2005; Cockshaw et al., 2013; McLaren et al., 2007). Moreover, these results also support research findings pertaining to individuals performing prosocial behaviours, such as helping and cooperating, when their need to belong is fulfilled (Pavey et al., 2011; Twenge et al., 2007; Weinstein & Ryan, 2010).

In an attempt to extend the extant research, this study hypothesised workplace belonging to have an indirect effect on the relationship between the idealised influence and intellectual stimulation dimensions of transformational leadership, and employee well-being and OCB. When controlling for idealised influence, there was no significant pathway between intellectual stimulation, workplace belonging, and any of the outcome variables. Conversely, when controlling for intellectual stimulation, there was a significant pathway between idealised influence, workplace belonging, and the outcomes of interest. These results suggest that idealised influence behaviours from a CEO are more important for fostering a sense of belonging within employees, which is then in turn associated with higher levels of employee well-being, OCB-altruism, and OCB-courtesy.



## Limitations

There are several limitations to this study that must be taken into consideration. Firstly, this study had a relatively small sample size ( $N = 94$ ) which may have diminished the statistical power necessary to detect certain effects, had they been present (Cumming, 2014). Considering the effect sizes obtained for some of the direct and mediated relationships, it is possible that with a larger sample the study would have identified further significant associations at  $p < .05$ . Future research consisting of a larger sample size is necessary to confirm the generalisability of the results and to increase the validity of the present study.

Due to the cross-sectional design of this study, the direction of causal influence regarding the variables of interest cannot be determined with certainty (Cockshaw & Shochet, 2010). The possibility that one's well-being and OCB influenced their perceptions of workplace belongingness as well as transformational leadership behaviour cannot be ruled out. Furthermore, as a result of a cross-sectional design, data pertaining to the predictor and outcome variables were obtained at a single time point (i.e., data collection was not temporally separated). There is a possibility that the results could have been different had the predictor and outcome data been collected at separate timepoints (Johnson, Rosen & Djurdjevic, 2011; Podsakoff, MacKenzie, Lee & Podsakoff, 2003).

While the hypothesised model of this study was grounded in literature, future research could implement a time-lagged longitudinal study design. This would allow for stronger causal inferences to be made regarding the directionality of the relationships between leadership behaviours, workplace belongingness, employee well-being, and OCB. Nonetheless, this study serves as a good starting point for future empirical research regarding the indirect effect of workplace belongingness on the relationship between leadership behaviours and employee outcomes.

One of the most recurrent issues with the use of self-report measures is common method variance, wherein the results obtained may have been attributed to the method of measurement used, as opposed to the constructs the measures were intended to capture (Podsakoff et al., 2003). The present study may have been particularly susceptible to CMV given that all measures were collected via questionnaire at one time point and were reliant on a single rater per questionnaire, with no other methods of subjective or objective data collection.

The consequences of CMV typically entail the observed relationships between variables being overstated (Podsakoff et al., 2003). In an attempt to minimise the occurrence of CMV in the present study, the questionnaire was structured in a manner wherein the item groups representing each variable were separated onto different pages (Podsakoff et al., 2003).

Lastly, social desirability bias may have occurred in the present study due to the use of self-report. Social desirability refers to individuals responding in a manner which they believe will be perceived positively by others, as opposed to how they truly feel about the matter (Podsakoff et al., 2003; van de Mortel, 2008). In the context of the present study, individuals may have overstated the extent to which they exhibit prosocial behaviours (i.e., OCB). Individuals may have also responded in a socially desirable manner in regard to the leadership items, as they may have been concerned about being reprimanded by their superiors for expressing negative opinions about their CEO. Socially desirable responding may have been mitigated by the anonymous nature of the questionnaire, as well as by the need for truthful answers being conveyed to participants prior to them beginning the questionnaire (Podsakoff et al., 2003). Despite the aforementioned limitations pertaining to self-report measures, the use of self-report is the most viable method for capturing one's perceptions and feelings (Conway & Lance, 2010; Podsakoff et al., 2003). Hence, the use of self-reports in the current study was deemed appropriate as it concerned individuals' perceptions of their sense of belonging at work, well-being, behaviours at work, as well as how they view the behaviours of their CEO.

## **Directions for Future Research**

Potential avenues for future research have been discussed to a small extent in the limitations section, however, there are some other directions which could be addressed to expand on the findings of the present study. As the present study focussed on transformational leadership at the CEO-level, future research could explore how the leadership behaviours of employees' immediate leaders influence their sense of workplace belonging. Immediate or direct leaders would undoubtedly have more contact with their employees, and in turn the dimensions of transformational leadership omitted in this study could be examined. For example, the dimensions of individual consideration and inspirational motivation would be more relevant regarding a leader who is in close proximity, as opposed to a CEO who is considerably more distal. Hence, future research could also consider leadership level when exploring the relationship between transformational leadership, workplace belongingness, and employee outcomes. This would help discern whether the day-to-day interactions with direct leaders or the leadership style of one's CEO is more influential in promoting workplace belongingness.

Correspondingly, future research examining these relationships at different organisational levels (e.g., team-level, department-level) may be more beneficial towards the purpose of identifying other potential antecedents of workplace belonging. Such research could include a qualitative section wherein employees can describe factors which either stimulate or prevent them experiencing belongingness at work. This would shed light on other antecedents to belongingness that future research may consider in addition to leadership.

To help overcome potential issues with CMV, future research could take measures for OCB from immediate supervisors as well as employees (Klotz et al., 2018; Nielsen et al., 2012). Additionally, measures could include both leaders' own perceptions of their leadership behaviours as well as their followers' perceptions (Atwater & Yammarino, 1992; Fleenor et al., 2010). Doing so could assist in possible interventions where leaders are trained to behave

more *transformationally* (discussed further in a later section). Future research may also benefit from the use of objective measures, such as employees' days of absence from work as a measure of well-being (Kelloway & Barling, 2010). Lastly, one could also identify whether workplace belongingness mediates the relationship between transformational leadership behaviours and more objective, distal outcomes, such as the overall performance of the organisation.

### **Theoretical and Practical Implications**

Despite the aforementioned limitations, the results of the present study have interesting theoretical and practical implications. The results of this study shed light on the underlying mechanisms through which transformational leadership has a positive impact on employee behaviours and outcomes. More specifically, the study examined transformational leadership at the component level and found that idealised influence was more conducive to fostering a sense of workplace belonging within employees than intellectual stimulation. It is these feelings of belonging which in turn mediate the effects of idealised influence on employee OCB and well-being. Ultimately, not only did this study answer calls to examine the influence of the individual transformational leadership components on employees (Tse et al., 2013; Yammarino & Bass, 1990), but it also provides further support for transformational leadership being one of the most effective leadership styles within the organisational literature (Avolio et al., 2009; Judge & Piccolo, 2004).

As mentioned previously, this study revealed leadership to be predictive of workplace belongingness. To the best of our knowledge, this is the first empirical study to explore the antecedents of workplace belongingness. Despite prior research outlining the importance of employees experiencing a sense of belonging at work (Armstrong et al., 2014; Curtis & Day, 2013; Somoray et al., 2017), factors which facilitate this experience remained unclear.

The findings of this study also corroborate the results of previous studies which demonstrated a sense of belonging to be associated with positive individual well-being (Baumeister et al., 2005; Blackhart et al., 2009; Cockshaw et al., 2013; Cockshaw & Shochet, 2010). Similarly, these findings provide further support for the idea that an individual exhibits higher levels of prosocial behaviour towards those whom they perceive as satisfying their need to belong (Pavey et al., 2011; Twenge et al., 2007).

With regards the practical implications of the study, the findings pertaining to workplace belongingness enhancing OCB and well-being may of be of particular interest to organisations. OCBs are voluntary behaviours that employees are not formally required to perform, however, such behaviours have been shown to play a role in the overall performance and success of organisations (Podsakoff et al., 2009; Wang et al., 2015). Comparably, employees who experience positive well-being are more likely to exhibit higher levels of job performance, job satisfaction, and be less likely to cost the organisation by way of lower absenteeism rates (Weiß & Süß, 2016; Wright & Cropanzano, 2000; Verhaeghe et al., 2006). Hence, organisations would benefit from implementing practices that foster the formation of healthy, supportive, interpersonal relationships between employees, promoting a sense of belongingness, and in turn creating a workplace environment wherein employees experience greater well-being and exhibit more OCBs.

There have been some notable strategies proposed by researchers to enhance employees' feelings of workplace belongingness. Some suggestions include enhancing leader and co-worker support, as well as implementing policies to enhance cohesiveness within work teams (Dávila & García, 2012; Huynh et al., 2013; Peng et al., 2016). Organisations could also alter the way feedback is conveyed to employees. For example, when conducting performance appraisals, it would be advisable for supervisors to engage with their employees openly and truthfully (Cassar et al., 2017). Supervisors should also recognise and commend the good

performance of their employees and not only focus on the negative aspects. In doing so, employees would feel supported, valued, and ultimately, this would facilitate the fostering feelings of belongingness within the workplace (Shakespeare-Finch & Daley, 2017).

The findings of the current study suggest that behaviours within the idealised influence dimension of transformational leadership are likely to engender an environment in which employees experience a sense of belonging at work. Transformational leadership has been demonstrated to be a skill which can be learned (Barling et al., 1996; Kearney & Gebert, 2009). Hence, organisations could train those in leadership positions to exhibit more transformational leadership behaviours. Organisations could also screen for transformational leadership behaviours when recruiting for leadership positions. Alternatively, they could also identify such individuals who are presently in their employ and appoint them to lead. The aforementioned suggestions have the promise to enhance employees' workplace belongingness, and in turn, positively influence their mental well-being and inclination to engage in OCBs.

## **Conclusion**

This study sought to examine the role of workplace belongingness in the relationships between transformational leadership and employee well-being and OCB. The findings revealed a sense of workplace belonging has the potential to positively influence the well-being of employees as well as their willingness to engage in OCB. Furthermore, a sense of workplace belonging was shown to mediate the relationship between the idealised influence dimension of transformational leadership, employee well-being, and OCB. This study also extended the extant literature on workplace belongingness by being the first to examine a potential antecedent of the experience. Several suggestions for future research have been suggested to further examine the role of transformational leadership as well as other potential precursors of

workplace belongingness. Overall, the results of this study emphasise the importance of organisations fulfilling employees' need to belong within their workplace context. Ways in which organisations could engender such an environment have been suggested.

## References

- Antonakis, J., Avolio, B. J., & Sivasubramaniam, N. (2003). Context and leadership: An examination of the nine-factor full-range leadership theory using the Multifactor Leadership Questionnaire. *The Leadership Quarterly*, 14(3), 261–295.  
[https://doi.org/10.1016/S1048-9843\(03\)00030-4](https://doi.org/10.1016/S1048-9843(03)00030-4)
- Armstrong, D., Shakespeare-Finch, J., & Shochet, I. (2014). Predicting post-traumatic growth and post-traumatic stress in firefighters: PTG and PTSD in firefighters. *Australian Journal of Psychology*, 66(1), 38–46. <https://doi.org/10.1111/ajpy.12032>
- Arnold, K. A. (2017). Transformational leadership and employee psychological well-being: A review and directions for future research. *Journal of Occupational Health Psychology*, 22(3), 381–393. <https://doi.org/10.1037/ocp0000062>
- Arnold, K. A., Turner, N., Barling, J., Kelloway, E. K., & McKee, M. C. (2007). Transformational leadership and psychological well-being: The mediating role of meaningful work. *Journal of Occupational Health Psychology*, 12(3), 193–203.  
<https://doi.org/10.1037/1076-8998.12.3.193>
- Ashforth, B. E., & Mael, F. (1989). Social Identity Theory and the Organization. *The Academy of Management Review*, 14(1), 20–39. <https://doi.org/10.2307/258189>
- Atwater, L. E., & Yammarino, F. J. (1992). Does Self-Other Agreement on Leadership Perceptions Moderate the Validity of Leadership And Performance Predictions? *Personnel Psychology*, 45(1), 141–164. <https://doi.org/10.1111/J.1744-6570.1992.Tb00848.X>
- Avolio, B. J., Bass, B. M., & Jung, D. I. (1999). Re-examining the components of transformational and transactional leadership using the Multifactor Leadership Questionnaire. *Journal of Occupational and Organizational Psychology*, 72(4), 441.



- Avolio, B. J., Walumbwa, F. O., & Weber, T. J. (2009). Leadership: Current Theories, Research, and Future Directions. *Annual Review of Psychology*, 60(1), 421–449.  
<https://doi.org/10.1146/annurev.psych.60.110707.163621>
- Babcock-Roberson, M. E., & Strickland, O. J. (2010). The Relationship Between Charismatic Leadership, Work Engagement, and Organizational Citizenship Behaviors. *The Journal of Psychology*, 144(3), 313–326. <https://doi.org/10.1080/00223981003648336>
- Bacha, E. (2014). The relationship between transformational leadership, task performance and job characteristics. *Journal of Management Development*, 33(4), 410–420.  
<https://doi.org/10.1108/JMD-02-2013-0025>
- Bakker, A. B., & Demerouti, E. (2007). The Job Demands-Resources model: State of the art. *Journal of Managerial Psychology*, 22(3), 309–328.  
<https://doi.org/10.1108/02683940710733115>
- Barling, J., Weber, T., & Kelloway, E. K. (1996). Effects of transformational leadership training on attitudinal and financial outcomes: A field experiment. *Journal of Applied Psychology*, 81(6), 827–832. <https://doi.org/10.1037//0021-9010.81.6.827>
- Bass, B. M., & Avolio, B. J. (1990). *Transformational leadership development: Manual for the multifactor leadership questionnaire*. Palo Alto, CA: Consulting Psychologists Press.
- Bass, Bernard M. (1990). From transactional to transformational leadership: Learning to share the vision. *Organizational Dynamics*, 18(3), 19–31. [https://doi.org/10.1016/0090-2616\(90\)90061-S](https://doi.org/10.1016/0090-2616(90)90061-S)
- Bass, Bernard M. (1999). Two Decades of Research and Development in Transformational Leadership. *European Journal of Work and Organizational Psychology*, 8(1), 9–32.  
<https://doi.org/10.1080/135943299398410>

- Bass, Bernard M., & Avolio, B. J. (1994). Transformational Leadership And Organizational Culture. *International Journal of Public Administration*, 17(3–4), 541–554.  
<https://doi.org/10.1080/01900699408524907>
- Bass, Bernard M., Avolio, B. J., Jung, D. I., & Berson, Y. (2003). Predicting unit performance by assessing transformational and transactional leadership. *Journal of Applied Psychology*, 88(2), 207–218. <https://doi.org/10.1037/0021-9010.88.2.207>
- Bass, Bernard M., Waldman, D. A., Avolio, B. J., & Bebb, M. (1987). Transformational Leadership and the Falling Dominoes Effect. *Group & Organization Studies*, 12(1), 73–87. <https://doi.org/10.1177/105960118701200106>
- Bass, B.M., & Avolio, B. J. (2004). *Manual for the Multifactor Leadership Questionnaire (Form 5X)*. Mind Garden, Inc.
- Baumeister, R. F., DeWall, C. N., Ciarocco, N. J., & Twenge, J. M. (2005). Social Exclusion Impairs Self-Regulation. *Journal of Personality and Social Psychology*, 88(4), 589–604.  
<https://doi.org/10.1037/0022-3514.88.4.589>
- Baumeister, R. F., & Leary, M. R. (1995). The need to belong: Desire for interpersonal attachments as a fundamental human motivation. *Psychological Bulletin*, 117(3), 497–529. <https://doi.org/10.1037/0033-2909.117.3.497>
- Blackhart, G. C., Nelson, B. C., Knowles, M. L., & Baumeister, R. F. (2009). Rejection Elicits Emotional Reactions but Neither Causes Immediate Distress nor Lowers Self-Esteem: A Meta-Analytic Review of 192 Studies on Social Exclusion. *Personality and Social Psychology Review*, 13(4), 269–309. <https://doi.org/10.1177/1088868309346065>
- Boehm, S. A., Dwertmann, D. J. G., Bruch, H., & Shamir, B. (2015). The missing link? Investigating organizational identity strength and transformational leadership climate as mechanisms that connect CEO charisma with firm performance. *The Leadership Quarterly*, 26(2), 156–171. <https://doi.org/10.1016/j.leaqua.2014.07.012>

- Bolino, M. C., Turnley, W. H., Gilstrap, J. B., & Suazo, M. M. (2009). Citizenship under pressure: What's a "good soldier" to do? *Journal of Organizational Behavior*, 31(6), 835–855. <https://doi.org/10.1002/job.635>
- Bono, J. E., & Judge, T. A. (2003). Self-Concordance at Work: Toward Understanding the Motivational Effects of Transformational Leaders. *The Academy of Management Journal*, 46(5), 554–571. <https://doi.org/10.2307/30040649>
- Cacioppo, J. T., Cacioppo, S., Capitanio, J. P., & Cole, S. W. (2015). The Neuroendocrinology of Social Isolation. *Annual Review of Psychology*, 66(1), 733–767. <https://doi.org/10.1146/annurev-psych-010814-015240>
- Caillier, J. G. (2016). Do Transformational Leaders Affect Turnover Intentions and Extra-Role Behaviors Through Mission Valence? *The American Review of Public Administration*, 46(2), 226–242. <https://doi.org/10.1177/0275074014551751>
- Cassar, V., Bezzina, F., & Buttigieg, S. C. (2017). The relationship between transformational leadership and work attitudes: Comparing mediating influences of social identity and the psychological contract. *Leadership & Organization Development Journal*, 38(5), 646–661. <https://doi.org/10.1108/LODJ-11-2015-0248>
- Chahal, H., & Mehta, S. (2010). Antecedents and consequences of Organisational Citizenship Behaviour (OCB): A conceptual framework in reference to health care sector. *Journal of Services Research*, 10(2), 25.
- Chang, C.-H., Johnson, R. E., & Yang, L.-Q. (2007). Emotional strain and organizational citizenship behaviours: A meta-analysis and review. *Work & Stress*, 21(4), 312–332. <https://doi.org/10.1080/02678370701758124>
- Chung, B. G., Ehrhart, K. H., Shore, L. M., Randel, A. E., Dean, M. A., & Kedharnath, U. (2019). Work Group Inclusion: Test of a Scale and Model. *Group & Organization Management*, 105960111983985. <https://doi.org/10.1177/1059601119839858>

- Cockshaw, Wendell D., Shochet, I. M., & Obst, P. L. (2014). Depression and Belongingness in General and Workplace Contexts: A Cross-Lagged Longitudinal Investigation. *Journal of Social and Clinical Psychology, 33*(5), 448–462.  
<https://doi.org/10.1521/jscp.2014.33.5.448>
- Cockshaw, Wendell David, & Shochet, I. (2010). The link between belongingness and depressive symptoms: An exploration in the workplace interpersonal context. *Australian Psychologist, 45*(4), 283–289. <https://doi.org/10.1080/00050061003752418>
- Cockshaw, Wendell David, Shochet, I. M., & Obst, P. L. (2013). General Belongingness, Workplace Belongingness, and Depressive Symptoms: Belongingness contexts and depression. *Journal of Community & Applied Social Psychology, 23*(3), 240–251.  
<https://doi.org/10.1002/casp.2121>
- Conway, J. M., & Lance, C. E. (2010). What Reviewers Should Expect from Authors Regarding Common Method Bias in Organizational Research. *Journal of Business and Psychology, 25*(3), 325–334. <https://doi.org/10.1007/s10869-010-9181-6>
- Corrigan, P. W., Diwan, S., Campion, J., & Rashid, F. (2002). Transformational Leadership and the Mental Health Team. *Administration and Policy in Mental Health, 30*(2), 97–108. <https://doi.org/10.1023/A:1022569617123>
- Culbertson, S. S., Fullagar, C. J., & Mills, M. J. (2010). Feeling Good and Doing Great: The Relationship Between Psychological Capital and Well-Being. *Journal of Occupational Health Psychology, 15*(4), 421–433. <https://doi.org/10.1037/a0020720>
- Cumming, G. (2014). The New Statistics: Why and How. *Psychological Science, 25*(1), 7–29.  
<https://doi.org/10.1177/0956797613504966>

- Curtis, A., & Day, A. (2013). The impact of specialist training on professional identity, organisational membership, organisational commitment, and stress in correctional psychologists. *The Journal of Forensic Practice*, 15(2), 130–140.  
<https://doi.org/10.1108/14636641311322313>
- De Cremer, D., & Van Knippenberg, D. (2002). How do leaders promote cooperation? The effects of charisma and procedural fairness. *Journal of Applied Psychology*, 87(5), 858–866. <https://doi.org/10.1037/0021-9010.87.5.858>
- Demerouti, E., Bakker, A. B., Nachreiner, F., & Schaufeli, W. B. (2001). The job demands-resources model of burnout. *Journal of Applied Psychology*, 86(3), 499–512.  
<https://doi.org/10.1037/0021-9010.86.3.499>
- Den Hartog, D. N., De Hoogh, A. H. B., & Keegan, A. E. (2007). The interactive effects of belongingness and charisma on helping and compliance. *Journal of Applied Psychology*, 92(4), 1131–1139. <https://doi.org/10.1037/0021-9010.92.4.1131>
- Densten, I. L. (2005). The Relationship Between Visioning Behaviours of Leaders and Follower Burnout. *British Journal of Management*, 16(2), 105–118.  
<https://doi.org/10.1111/j.1467-8551.2005.00428.x>
- DeVellis, R. F. (2017). *Scale development: Theory and applications* (Fourth edition). SAGE.
- Dvir, T., Eden, D., Avolio, B. J., & Shamir, B. (2002). Impact of Transformational Leadership on Follower Development and Performance: A Field Experiment. *The Academy of Management Journal*, 45(4), 735–744. <https://doi.org/10.2307/3069307>
- Eisenberger, N. I. (2013). Social ties and health: A social neuroscience perspective. *Current Opinion in Neurobiology*, 23(3), 407–413. <https://doi.org/10.1016/j.conb.2013.01.006>

- Epitropaki, O., & Martin, R. (2005). The moderating role of individual differences in the relation between transformational/transactional leadership perceptions and organizational identification. *The Leadership Quarterly*, 16(4), 569–589.  
<https://doi.org/10.1016/j.leaqua.2005.06.005>
- Fat, L. N., Scholes, S., Boniface, S., Mindell, J., & Stewart-Brown, S. (2017). Evaluating and establishing national norms for mental wellbeing using the short Warwick–Edinburgh Mental Well-being Scale (SWEMWBS): Findings from the Health Survey for England. *Quality of Life Research*, 26(5), 1129–1144. <https://doi.org/10.1007/s11136-016-1454-8>
- Fleenor, J. W., Smither, J. W., Atwater, L. E., Braddy, P. W., & Sturm, R. E. (2010). Self–other rating agreement in leadership: A review. *The Leadership Quarterly*, 21(6), 1005–1034. <https://doi.org/10.1016/j.leaqua.2010.10.006>
- Franke, F., & Felfe, J. (2011). How does transformational leadership impact employees' psychological strain?: Examining differentiated effects and the moderating role of affective organizational commitment. *Leadership*, 7(3), 295–316.  
<https://doi.org/10.1177/1742715011407387>
- Grant, A. M., & Sonnentag, S. (2010). Doing good buffers against feeling bad: Prosocial impact compensates for negative task and self-evaluations. *Organizational Behavior and Human Decision Processes*, 111(1), 13–22. <https://doi.org/10.1016/j.obhdp.2009.07.003>
- Hackett, R. D., Wang, A.-C., Chen, Z., Cheng, B.-S., & Farh, J.-L. (2018). Transformational Leadership and Organisational Citizenship Behaviour: A Moderated Mediation Model of Leader-Member-Exchange and Subordinates' Gender: GENDER AS A MODERATOR. *Applied Psychology*, 67(4), 617–644. <https://doi.org/10.1111/apps.12146>
- Halbesleben, J. R. B., & Wheeler, A. R. (2015). To Invest or Not? The Role of Coworker Support and Trust in Daily Reciprocal Gain Spirals of Helping Behavior. *Journal of Management*, 41(6), 1628–1650. <https://doi.org/10.1177/0149206312455246>

- Hayes, A. F. (2013). *Introduction to mediation, moderation, and conditional process analysis: A regression-based approach*. The Guilford Press.
- Hetland, J., Hetland, H., Bakker, A. B., Demerouti, E., Andreassen, C. S., & Pallesen, S. (2015). Psychological need fulfillment as a mediator of the relationship between transformational leadership and positive job attitudes. *Career Development International*, 20(5), 464–481. <https://doi.org/10.1108/CDI-10-2014-0136>
- Hinkin, T. R., Tracey, J. B., & Enz, C. A. (1997). Scale Construction: Developing Reliable and Valid Measurement Instruments. *Journal of Hospitality & Tourism Research*, 21(1), 100–120. <https://doi.org/10.1177/109634809702100108>
- Hoffman, B. J., Blair, C. A., Meriac, J. P., & Woehr, D. J. (2007). Expanding the Criterion Domain? A Quantitative Review of the OCB Literature. *Journal of Applied Psychology*, 92(2), 555–566. <https://doi.org/10.1037/0021-9010.92.2.555>
- Hsien, L. C., Pei, N. F., Yung, P. C., & Sheng, C. T. (2014). A Study on the Correlations between Knowledge Sharing Behavior and Organizational Citizenship Behavior in Catering Industry: The Viewpoint of Theory of Planned Behavior. *The Anthropologist*, 17(3), 873–881. <https://doi.org/10.1080/09720073.2014.11891502>
- Humphrey, R. H., Burch, G. F., & Adams, L. L. (2016). The Benefits of Merging Leadership Research and Emotions Research. *Frontiers in Psychology*, 7. <https://doi.org/10.3389/fpsyg.2016.01022>
- Huynh, J. Y., Xanthopoulou, D., & Winefield, A. H. (2013). Social support moderates the impact of demands on burnout and organizational connectedness: A two-wave study of volunteer firefighters. *Journal of Occupational Health Psychology*, 18(1), 9–15. <https://doi.org/10.1037/a0030804>

- Huynh, J. Y., Xanthopoulou, D., & Winefield, A. H. (2014). The Job Demands-Resources Model in emergency service volunteers: Examining the mediating roles of exhaustion, work engagement and organizational connectedness. *Work & Stress*, 28(3), 305–322. <https://doi.org/10.1080/02678373.2014.936922>
- Johnson, R. E., Rosen, C. C., & Djurdjevic, E. (2011). Assessing the impact of common method variance on higher order multidimensional constructs. *Journal of Applied Psychology*, 96(4), 744–761. <https://doi.org/10.1037/a0021504>
- Judge, T. A., & Piccolo, R. F. (2004). Transformational and Transactional Leadership: A Meta-Analytic Test of Their Relative Validity. *Journal of Applied Psychology*, 89(5), 755–768. <https://doi.org/10.1037/0021-9010.89.5.755>
- Jung, D. I., & Sosik, J. J. (2002). Transformational Leadership in Work Groups: The Role of Empowerment, Cohesiveness, and Collective-Efficacy on Perceived Group Performance. *Small Group Research*, 33(3), 313–336. <https://doi.org/10.1177/10496402033003002>
- Kacmar, K. M., Bachrach, D. G., Harris, K. J., & Zivnuska, S. (2011). Fostering good citizenship through ethical leadership: Exploring the moderating role of gender and organizational politics. *Journal of Applied Psychology*, 96(3), 633–642. <https://doi.org/10.1037/a0021872>
- Kaiser, H. F. (1960). The Application of Electronic Computers to Factor Analysis. *Educational and Psychological Measurement*, 20(1), 141–151. <https://doi.org/10.1177/001316446002000116>
- Kam, C. C. S., & Fan, X. (2018). Investigating Response Heterogeneity in the Context of Positively and Negatively Worded Items by Using Factor Mixture Modeling. *Organizational Research Methods*, 109442811879037. <https://doi.org/10.1177/1094428118790371>



- Kearney, E., & Gebert, D. (2009). Managing Diversity and Enhancing Team Outcomes: The Promise of Transformational Leadership. *Journal of Applied Psychology*, 94(1), 77–89. <https://doi.org/10.1037/a0013077>
- Kelloway, E. K., & Barling, J. (2010). Leadership development as an intervention in occupational health psychology. *Work & Stress*, 24(3), 260–279. <https://doi.org/10.1080/02678373.2010.518441>
- Kelloway, E. K., Turner, N., Barling, J., & Loughlin, C. (2012). Transformational leadership and employee psychological well-being: The mediating role of employee trust in leadership. *Work & Stress*, 26(1), 39–55. <https://doi.org/10.1080/02678373.2012.660774>
- Khalili, A. (2017). Transformational leadership and organizational citizenship behavior: The moderating role of emotional intelligence. *Leadership & Organization Development Journal*, 38(7), 1004–1015. <https://doi.org/10.1108/LODJ-11-2016-0269>
- Klotz, A. C., Bolino, M. C., Song, H., & Stornelli, J. (2018). Examining the nature, causes, and consequences of profiles of organizational citizenship behavior. *Journal of Organizational Behavior*, 39(5), 629–647. <https://doi.org/10.1002/job.2259>
- Kyei-Poku, I. (2014). The benefits of belongingness and interactional fairness to interpersonal citizenship behavior. *Leadership & Organization Development Journal*, 35(8), 691–709. <https://doi.org/10.1108/LODJ-09-2012-0117>
- Lam, S. S. K., Hui, C., & Law, K. S. (1999). Organizational citizenship behavior: Comparing perspectives of supervisors and subordinates across four international samples. *Journal of Applied Psychology*, 84(4), 594–601. <https://doi.org/10.1037/0021-9010.84.4.594>
- Leary, M. R., & Baumeister, R. F. (2000). The nature and function of self-esteem: Sociometer theory. In *Advances in Experimental Social Psychology* (Vol. 32, pp. 1–62). Elsevier. [https://doi.org/10.1016/S0065-2601\(00\)80003-9](https://doi.org/10.1016/S0065-2601(00)80003-9)

- Lee, K., & Allen, N. J. (2002). Organizational Citizenship Behavior and Workplace Deviance: The Role of Affect and Cognitions. *Journal of Applied Psychology*, 87(1), 131–142.  
<https://doi.org/10.1037/0021-9010.87.1.131>
- Lee, Y. H., Woo, B., & Kim, Y. (2018). Transformational leadership and organizational citizenship behavior: Mediating role of affective commitment. *International Journal of Sports Science & Coaching*, 13(3), 373–382. <https://doi.org/10.1177/1747954117725286>
- Lievens Pascal Van Geit Pol Coetsier, F. (1997). Identification of Transformational Leadership Qualities: An Examination of Potential Biases. *European Journal of Work and Organizational Psychology*, 6(4), 415–430.  
<https://doi.org/10.1080/135943297399015>
- Lin, H.-C., Dang, T. T. H., & Liu, Y.-S. (2016). CEO transformational leadership and firm performance: A moderated mediation model of TMT trust climate and environmental dynamism. *Asia Pacific Journal of Management*, 33(4), 981–1008.  
<https://doi.org/10.1007/s10490-016-9468-x>
- Liu, Jiayan, Siu, O.-L., & Shi, K. (2009). Transformational Leadership and Employee Well-Being: The Mediating Role of Trust in the Leader and Self-Efficacy: TRANSFORMATIONAL LEADERSHIP. *Applied Psychology*, 59(3), 454–479.  
<https://doi.org/10.1111/j.1464-0597.2009.00407.x>
- Liu, Jun, Wang, H., Hui, C., & Lee, C. (2012). Psychological Ownership: How Having Control Matters: Psychological Ownership: How Having Control Matters. *Journal of Management Studies*, 49(5), 869–895. <https://doi.org/10.1111/j.1467-6486.2011.01028.x>
- MacKenzie, S. B., Podsakoff, P. M., & Rich, G. A. (2001). Transformational and transactional leadership and salesperson performance. *Journal of the Academy of Marketing Science*, 29(2), 115–134. <https://doi.org/10.1177/03079459994506>

- Mael, F., & Ashforth, B. E. (1992). Alumni and their alma mater: A partial test of the reformulated model of organizational identification. *Journal of Organizational Behavior*, 13(2), 103;123;-123. <https://doi.org/10.1002/job.4030130202>
- Martin, R., & Epitropaki, O. (2001). Role of Organizational Identification on Implicit Leadership Theories (ILTs), Transformational Leadership and Work Attitudes. *Group Processes & Intergroup Relations*, 4(3), 247–262.  
<https://doi.org/10.1177/1368430201004003005>
- McLaren, S., Gomez, R., Bailey, M., & Van Der Horst, R. K. (2007). The Association of Depression and Sense of Belonging with Suicidal Ideation Among Older Adults: Applicability of Resiliency Models. *Suicide and Life-Threatening Behavior*, 37(1), 89–102. <https://doi.org/10.1521/suli.2007.37.1.89>
- Moriano, J. A., Molero, F., Topa, G., & Lévy Mangin, J.-P. (2014). The influence of transformational leadership and organizational identification on intrapreneurship. *International Entrepreneurship and Management Journal*, 10(1), 103–119.  
<https://doi.org/10.1007/s11365-011-0196-x>
- Nembhard, I. M., & Edmondson, A. C. (2006). Making It Safe: The Effects of Leader Inclusiveness and Professional Status on Psychological Safety and Improvement Efforts in Health Care Teams. *Journal of Organizational Behavior*, 27(7), 941–966.  
<https://doi.org/10.1002/job.413>
- Ng, T. W. H. (2017). Transformational leadership and performance outcomes: Analyses of multiple mediation pathways. *The Leadership Quarterly*, 28(3), 385–417.  
<https://doi.org/10.1016/j.leaqua.2016.11.008>
- Nielsen, K., & Daniels, K. (2012). Does shared and differentiated transformational leadership predict followers' working conditions and well-being? *The Leadership Quarterly*, 23(3), 383–397. <https://doi.org/10.1016/j.leaqua.2011.09.001>

- Nielsen, T. M., Bachrach, D. G., Sundstrom, E., & Halfhill, T. R. (2012). Utility of OCB: Organizational Citizenship Behavior and Group Performance in a Resource Allocation Framework. *Journal of Management*, 38(2), 668–694.  
<https://doi.org/10.1177/0149206309356326>
- Nohe, C., & Hertel, G. (2017). Transformational Leadership and Organizational Citizenship Behavior: A Meta-Analytic Test of Underlying Mechanisms. *Frontiers in Psychology*, 8, 1364. <https://doi.org/10.3389/fpsyg.2017.01364>
- Ocampo, L., Acedillo, V., Bacunador, A. M., Balo, C. C., Lagdameo, Y. J., & Tupa, N. S. (2018). A historical review of the development of organizational citizenship behavior (OCB) and its implications for the twenty-first century. *Personnel Review*, 47(4), 821–862. <https://doi.org/10.1108/PR-04-2017-0136>
- Organ, D. W. (1988). *Issues in organization and management series. Organizational citizenship behavior: The good soldier syndrome*. Lexington Books.
- Organ, D. W. (1990). The motivational basis of organizational citizenship behavior. In B. M. Staw & L. L. Cummings, *Research in organizational behavior* (Vol. 12, pp. 43–72). JAI Press.
- Ou, A. Y., Tsui, A. S., Kinicki, A. J., Waldman, D. A., Xiao, Z., & Song, L. J. (2014). Humble Chief Executive Officers' Connections to Top Management Team Integration and Middle Managers' Responses. *Administrative Science Quarterly*, 59(1), 34–72.  
<https://doi.org/10.1177/0001839213520131>
- Paré, G., & Tremblay, M. (2007). The Influence of High-Involvement Human Resources Practices, Procedural Justice, Organizational Commitment, and Citizenship Behaviors on Information Technology Professionals' Turnover Intentions. *Group & Organization Management*, 32(3), 326–357. <https://doi.org/10.1177/1059601106286875>

- Pavey, L., Greitemeyer, T., & Sparks, P. (2011). Highlighting Relatedness Promotes Prosocial Motives and Behavior. *Personality and Social Psychology Bulletin*, 37(7), 905–917.  
<https://doi.org/10.1177/0146167211405994>
- Peng, A. C., Lin, H.-E., Schaubroeck, J., McDonough, E. F., Hu, B., & Zhang, A. (2016). CEO Intellectual Stimulation and Employee Work Meaningfulness: The Moderating Role of Organizational Context. *Group & Organization Management*, 41(2), 203–231.  
<https://doi.org/10.1177/1059601115592982>
- Perko, K., Kinnunen, U., & Feldt, T. (2014). Transformational leadership and depressive symptoms among employees: Mediating factors. *Leadership & Organization Development Journal*, 35(4), 286–304. <https://doi.org/10.1108/LODJ-07-2012-0082>
- Piccolo, R. F., & Colquitt, J. A. (2006). Transformational Leadership and Job Behaviors: The Mediating Role of Core Job Characteristics. *The Academy of Management Journal*, 49(2), 327–340. <https://doi.org/10.5465/AMJ.2006.20786079>
- Pillai, R., Schriesheim, C. A., & Williams, E. S. (1999). Fairness Perceptions and Trust as Mediators for Transformational and Transactional Leadership: A Two-Sample Study. *Journal of Management*, 25(6), 897–933. <https://doi.org/10.1177/014920639902500606>
- Pillai, R., & Williams, E. A. (2004). Transformational leadership, self-efficacy, group cohesiveness, commitment, and performance. *Journal of Organizational Change Management*, 17(2), 144–159. <https://doi.org/10.1108/09534810410530584>
- Podsakoff, N. P., Whiting, S. W., Podsakoff, P. M., & Blume, B. D. (2009). Individual- and organizational-level consequences of organizational citizenship behaviors: A meta-analysis. *Journal of Applied Psychology*, 94(1), 122–141.  
<https://doi.org/10.1037/a0013079>

- Podsakoff, P. M., MacKenzie, S. B., Lee, J.-Y., & Podsakoff, N. P. (2003). Common method biases in behavioral research: A critical review of the literature and recommended remedies. *Journal of Applied Psychology*, 88(5), 879–903. <https://doi.org/10.1037/0021-9010.88.5.879>
- Podsakoff, P. M., MacKenzie, S. B., Moorman, R. H., & Fetter, R. (1990). Transformational leader behaviors and their effects on followers' trust in leader, satisfaction, and organizational citizenship behaviors. *The Leadership Quarterly*, 1(2), 107–142. [https://doi.org/10.1016/1048-9843\(90\)90009-7](https://doi.org/10.1016/1048-9843(90)90009-7)
- Podsakoff, P. M., MacKenzie, S. B., Paine, J. B., & Bachrach, D. G. (2000). Organizational Citizenship Behaviors: A Critical Review of the Theoretical and Empirical Literature and Suggestions for Future Research. *Journal of Management*, 26(3), 513–563. <https://doi.org/10.1177/014920630002600307>
- Randel, A. E., Galvin, B. M., Shore, L. M., Ehrhart, K. H., Chung, B. G., Dean, M. A., & Kedharnath, U. (2018). Inclusive leadership: Realizing positive outcomes through belongingness and being valued for uniqueness. *Human Resource Management Review*, 28(2), 190–203. <https://doi.org/10.1016/j.hrmr.2017.07.002>
- Ryan, R. M., & Deci, E. L. (2001). On Happiness and Human Potentials: A Review of Research on Hedonic and Eudaimonic Well-Being. *Annual Review of Psychology*, 52(1), 141–166. <https://doi.org/10.1146/annurev.psych.52.1.141>
- Ryff, C. D., & Keyes, C. L. (1995). The structure of psychological well-being revisited. *Journal of Personality and Social Psychology*, 69(4), 719–727. <https://doi.org/10.1037//0022-3514.69.4.719>

Schuh, S. C., Zhang, X., Egold, N. W., Graf, M. M., Pandey, D., & van Dick, R. (2012).

Leader and follower organizational identification: The mediating role of leader behaviour and implications for follower OCB: OI transfer and leadership behaviour. *Journal of Occupational and Organizational Psychology*, 85(2), 421–432.

<https://doi.org/10.1111/j.2044-8325.2011.02044.x>

Shakespeare-Finch, J., & Daley, E. (2017). Workplace belongingness, distress, and resilience in emergency service workers. *Psychological Trauma: Theory, Research, Practice, and Policy*, 9(1), 32–35. <https://doi.org/10.1037/tra0000108>

Shamir, B., House, R. J., & Arthur, M. B. (1993). The Motivational Effects of Charismatic Leadership: A Self-Concept Based Theory. *Organization Science*, 4(4), 577–594.

<https://doi.org/10.1287/orsc.4.4.577>

Shore, L. M., Randel, A. E., Chung, B. G., Dean, M. A., Holcombe Ehrhart, K., & Singh, G. (2011). Inclusion and Diversity in Work Groups: A Review and Model for Future Research. *Journal of Management*, 37(4), 1262–1289.

<https://doi.org/10.1177/0149206310385943>

Sivanathan, N., Arnold, K. A., Turner, N., & Barling, J. (2012). Leading Well: Transformational Leadership and Well-Being. In P. A. Linley & S. Joseph (Eds.), *Positive Psychology in Practice* (pp. 241–255). John Wiley & Sons, Inc.

<https://doi.org/10.1002/9780470939338.ch15>

Smidts, A., Pruyn, A. Th. H., & Van Riel, C. B. M. (2001). The Impact of Employee Communication and Perceived External Prestige On Organizational Identification.

*Academy of Management Journal*, 44(5), 1051–1062. <https://doi.org/10.5465/3069448>

- Somoray, K., Shakespeare-Finch, J., & Armstrong, D. (2017). The Impact of Personality and Workplace Belongingness on Mental Health Workers' Professional Quality of Life: Professional quality of life. *Australian Psychologist*, 52(1), 52–60.  
<https://doi.org/10.1111/ap.12182>
- Sosik, J. J., & Godshalk, V. M. (2000). Leadership Styles, Mentoring Functions Received, and Job-Related Stress: A Conceptual Model and Preliminary Study. *Journal of Organizational Behavior*, 21(4), 365–390. [https://doi.org/10.1002/\(SICI\)1099-1379\(200006\)21:4<365::AID-JOB14>3.0.CO;2-H](https://doi.org/10.1002/(SICI)1099-1379(200006)21:4<365::AID-JOB14>3.0.CO;2-H)
- Stenling, A., & Tafvelin, S. (2014). Transformational Leadership and Well-Being in Sports: The Mediating Role of Need Satisfaction. *Journal of Applied Sport Psychology*, 26(2), 182–196. <https://doi.org/10.1080/10413200.2013.819392>
- Stewart-Brown, S., Tennant, A., Tennant, R., Platt, S., Parkinson, J., & Weich, S. (2009). Internal construct validity of the Warwick-Edinburgh Mental Well-being Scale (WEMWBS): A Rasch analysis using data from the Scottish Health Education Population Survey. *Health and Quality of Life Outcomes*, 7(1), 15.  
<https://doi.org/10.1186/1477-7525-7-15>
- Su, Z.-X., Wang, Z., & Chen, S. (2019). The impact of CEO transformational leadership on organizational voluntary turnover and employee innovative behaviour: The mediating role of collaborative HRM. *Asia Pacific Journal of Human Resources*.  
<https://doi.org/10.1111/1744-7941.12217>
- Sundstrom, E., McIntyre, M., Halfhill, T., & Richards, H. (2000). Work Groups: From the Hawthorne Studies to Work Teams of the 1990s and Beyond. *Group Dynamics: Theory, Research, and Practice*, 4(1), 44–67. <https://doi.org/10.1037/1089-2699.4.1.44>



- Syrek, C. J., Apostel, E., & Antoni, C. H. (2013). Stress in highly demanding IT jobs: Transformational leadership moderates the impact of time pressure on exhaustion and work–life balance. *Journal of Occupational Health Psychology, 18*(3), 252–261.  
<https://doi.org/10.1037/a0033085>
- Tafvelin, S., Armelius, K., & Westerberg, K. (2011). Toward Understanding the Direct and Indirect Effects of Transformational Leadership on Well-Being: A Longitudinal Study. *Journal of Leadership & Organizational Studies, 18*(4), 480–492.  
<https://doi.org/10.1177/1548051811418342>
- Tennant, R., Hiller, L., Fishwick, R., Platt, S., Joseph, S., Weich, S., Parkinson, J., Secker, J., & Stewart-Brown, S. (2007). The Warwick-Edinburgh Mental Well-being Scale (WEMWBS): Development and UK validation. *Health and Quality of Life Outcomes, 5*(1), 63. <https://doi.org/10.1186/1477-7525-5-63>
- Thau, S., Aquino, K., & Poortvliet, P. M. (2007). Self-defeating behaviors in organizations: The relationship between thwarted belonging and interpersonal work behaviors. *Journal of Applied Psychology, 92*(3), 840–847. <https://doi.org/10.1037/0021-9010.92.3.840>
- Tse, H. H. M., & Chiu, W. C. K. (2014). Transformational leadership and job performance: A social identity perspective. *Journal of Business Research, 67*(1), 2827–2835.  
<https://doi.org/10.1016/j.jbusres.2012.07.018>
- Tse, H. H. M., Huang, X., & Lam, W. (2013). Why does transformational leadership matter for employee turnover? A multi-foci social exchange perspective. *The Leadership Quarterly, 24*(5), 763–776. <https://doi.org/10.1016/j.leaqua.2013.07.005>
- Twenge, J. M., Baumeister, R. F., DeWall, C. N., Ciarocco, N. J., & Bartels, J. M. (2007). Social exclusion decreases prosocial behavior. *Journal of Personality and Social Psychology, 92*(1), 56–66. <https://doi.org/10.1037/0022-3514.92.1.56>

- Twenge, J. M., Baumeister, R. F., Tice, D. M., & Stucke, T. S. (2001). If You Can't Join Them, Beat Them: Effects of Social Exclusion on Aggressive Behavior. *Journal of Personality and Social Psychology*, 81(6), 1058–1069. <https://doi.org/10.1037/0022-3514.81.6.1058>
- Twenge, J. M., Zhang, L., Catanese, K. R., Dolan-Pascoe, B., Lyche, L. F., & Baumeister, R. F. (2007). Replenishing connectedness: Reminders of social activity reduce aggression after social exclusion. *British Journal of Social Psychology*, 46(1), 205–224. <https://doi.org/10.1348/014466605X90793>
- Tyler, T., Degoey, P., & Smith, H. (1996). Understanding Why the Justice of Group Procedures Matters: A Test of the Psychological Dynamics of the Group-Value Model. *Journal of Personality and Social Psychology*, 70(5), 913–930. <https://doi.org/10.1037/0022-3514.70.5.913>
- van de Mortel, T. F. (2008). Faking It: Social Desirability Response Bias in Self-report Research. *Australian Journal of Advanced Nursing, The*, 25(4), 40–48.
- Van Orden, K. A., Witte, T. K., Gordon, K. H., Bender, T. W., & Joiner, T. E. (2008). Suicidal Desire and the Capability for Suicide: Tests of the Interpersonal-Psychological Theory of Suicidal Behavior Among Adults. *Journal of Consulting and Clinical Psychology*, 76(1), 72–83. <https://doi.org/10.1037/0022-006X.76.1.72>
- Van Scotter, J. R., Motowidlo, S. J., & Cross, T. C. (2000). Effects of task performance and contextual performance on systemic rewards. *The Journal of Applied Psychology*, 85(4), 526–535. <https://doi.org/10.1037//0021-9010.85.4.526>
- Vanderhorst, R. K., & McLaren, S. (2005). Social relationships as predictors of depression and suicidal ideation in older adults. *Aging & Mental Health*, 9(6), 517–525. <https://doi.org/10.1080/13607860500193062>

- Vera, D., & Crossan, M. (2004). Strategic Leadership and Organizational Learning. *Academy of Management Review*, 29(2), 222–240. <https://doi.org/10.5465/amr.2004.12736080>
- Waldman, D. A., Carter, M. Z., & Hom, P. W. (2015). A Multilevel Investigation of Leadership and Turnover Behavior. *Journal of Management*, 41(6), 1724–1744. <https://doi.org/10.1177/0149206312460679>
- Walumbwa, F. O., Orwa, B., Wang, P., & Lawler, J. J. (2005). Transformational leadership, organizational commitment, and job satisfaction: A comparative study of Kenyan and U.S. financial firms. *Human Resource Development Quarterly*, 16(2), 235–256. <https://doi.org/10.1002/hrdq.1135>
- Wang, G., Oh, I.-S., Courtright, S. H., & Colbert, A. E. (2011). Transformational Leadership and Performance Across Criteria and Levels: A Meta-Analytic Review of 25 Years of Research. *Group & Organization Management*, 36(2), 223–270. <https://doi.org/10.1177/1059601111401017>
- Wang, H. H., Lu, C., & Siu, O. (2015). Job insecurity and job performance: The moderating role of organizational justice and the mediating role of work engagement. *Journal of Applied Psychology*, 100(4), 1249–1258. <https://doi.org/10.1037/a0038330>
- Wang, H., Law, K. S., Hackett, R. D., Wang, D., & Chen, Z. X. (2005). Leader-Member Exchange as a Mediator of the Relationship between Transformational Leadership and Followers' Performance and Organizational Citizenship Behavior. *The Academy of Management Journal*, 48(3), 420–432. <https://doi.org/10.5465/AMJ.2005.17407908>
- Wang, H., Tsui, A. S., & Xin, K. R. (2011). CEO leadership behaviors, organizational performance, and employees' attitudes. *The Leadership Quarterly*, 22(1), 92–105. <https://doi.org/10.1016/j.leaqua.2010.12.009>

- Wang, H.-J., Demerouti, E., & Le Blanc, P. (2017). Transformational leadership, adaptability, and job crafting: The moderating role of organizational identification. *Journal of Vocational Behavior*, 100, 185–195. <https://doi.org/10.1016/j.jvb.2017.03.009>
- Weinstein, N., & Ryan, R. M. (2010). When Helping Helps: Autonomous Motivation for Prosocial Behavior and Its Influence on Well-Being for the Helper and Recipient. *Journal of Personality and Social Psychology*, 98(2), 222–244. <https://doi.org/10.1037/a0016984>
- Weiß, E.-E., & Süß, S. (2016). The relationship between transformational leadership and effort-reward imbalance. *Leadership & Organization Development Journal*, 37(4), 450–466. <https://doi.org/10.1108/LODJ-08-2014-0146>
- Williams, L. J., & Anderson, S. E. (1991). Job Satisfaction and Organizational Commitment as Predictors of Organizational Citizenship and In-Role Behaviors. *Journal of Management*, 17(3), 601–617. <https://doi.org/10.1177/014920639101700305>
- Wolf, L. D., & Davis, M. C. (2014). Loneliness, daily pain, and perceptions of interpersonal events in adults with fibromyalgia. *Health Psychology*, 33(9), 929–937. <https://doi.org/10.1037/hea0000059>
- Wright, T. A., & Cropanzano, R. (2000). Psychological Well-Being and Job Satisfaction as Predictors of Job Performance. *Journal of Occupational Health Psychology*, 5(1), 84–94. <https://doi.org/10.1037/1076-8998.5.1.84>
- Xi, M., Zhao, S., & Xu, Q. (2017). The influence of CEO relationship-focused behaviors on firm performance: A chain-mediating role of employee relations climate and employees' attitudes. *Asia Pacific Journal of Management*, 34(1), 173–192. <https://doi.org/10.1007/s10490-016-9487-7>

Yammarino, F. J., & Bass, B. M. (1990). Transformational Leadership and Multiple Levels of Analysis. *Human Relations*, 43(10), 975–995.

<https://doi.org/10.1177/001872679004301003>

Zhu, W., Sosik, J. J., Riggio, R. E., & Yang, B. (2012). Relationships between Transformational and Active Transactional Leadership and Followers' Organizational Identification: The Role of Psychological Empowerment. *Journal of Behavioral and Applied Management*, 13(3), 186.

## Appendix A: Employee Recruitment Email

**Email Subject:** Research Recruitment Email - Impact of leadership on belongingness within the workplace.

**Email Header:** Have you considered the benefits of employees experiencing a sense of belonging at work?

**Email:** Hello,

I am a Master of Science student at the University of Canterbury, currently exploring whether leadership facilitates a sense of belonging within the workplace. Furthermore, the study will also examine whether this relationship influences employees' well-being as well as their willingness to engage in prosocial work behaviours (e.g., altruism and courtesy).

Your organisation has kindly allowed me to request its employees to participate in this research. Your participation in this research is completely voluntary, please feel free to decline (or withdraw from the questionnaire at any point). As your part in this research will be to fill out an anonymous questionnaire in your own time, there will be no way to identify who has or has not participated.

To get in touch, please use my email address below. However, if you would like to know a bit more information, please read the attached Information and Consent Sheet.

Manu Singh

Email: [manu.singh@pg.canterbury.ac.nz](mailto:manu.singh@pg.canterbury.ac.nz)

Once you have read the Information and Consent Sheet and wish to participate, please click on the link below to complete the anonymous questionnaire.

[http://canterbury.qualtrics.com/jfe/form/SV\\_b4oIvfyl883wzQ1](http://canterbury.qualtrics.com/jfe/form/SV_b4oIvfyl883wzQ1)

Kind regards,

Manu Singh

## Appendix B: Information and Consent Sheet

School of Psychology, Speech and Hearing  
Email: [manu.singh@pg.canterbury.ac.nz](mailto:manu.singh@pg.canterbury.ac.nz)



### Examining the Impact of Leadership on Belongingness Within the Workplace

#### Information and Consent Sheet

My name is Manu Singh and I am a Master of Science student at the University of Canterbury. I am conducting research which aims to examine whether and how a sense of belonging at work impacts employees' well-being and workplace behaviours, and the role of leaders in this relationship. The intent is to identify ways in which belongingness can be improved in organisations, leading to a positive work environment.

If you choose to participate in this research, you will be requested to complete an online questionnaire. **The questionnaire should take no more than 20 minutes of your time to complete.**

**Participation is voluntary** and you have the right to withdraw at any stage by exiting the browser window. However, once you have click "submit" at the end of the questionnaire, you will no longer be able to withdraw your data from the study as your responses will be completely **anonymous** and you will not be identifiable as a participant.

If you complete **If you complete the questionnaire, you are eligible to enter a prize draw to win one of five \$100 Westfield vouchers.** Once you have completed the questionnaire, you will be directed to a separate link to provide contact details. This page is in no way linked to the questionnaire responses.

Should participation in this study cause you any distress, please withdraw from the questionnaire. If you require further assistance, please do not hesitate to contact the following.

Lifeline: 0800 543 354- For phone counselling and support  
Depression Helpline: 0800 111 757- For specific depression counselling

The results of this study may be published in academic journals and will be available through the University of Canterbury Library. Individuals and specific organisations will not be identified. All the data collected for this study will be kept on a password-protected computer at the University of Canterbury and will not be accessible to anyone but myself, my senior supervisor Dr Joana Kuntz, and my secondary supervisor Professor Katharina Näswall. The data collected will be kept for five years and then safely deleted from any files and servers. Any emails collected for the prize draw will be collected on a separate page and will be in no way associated with responses.

The project is being carried out as a requirement for the Master of Science degree specialising in Applied Psychology by Manu Singh under the supervision of Joana Kuntz, who can be contacted at [joana.kuntz@canterbury.ac.nz](mailto:joana.kuntz@canterbury.ac.nz). She will be happy to discuss any concerns you may have about participating in this research.

This project has been reviewed and approved by the University of Canterbury Human Ethics Committee, and participants should address any complaints to The Chair, Human Ethics Committee, University of Canterbury, Private Bag 4800, Christchurch ([human-ethics@canterbury.ac.nz](mailto:human-ethics@canterbury.ac.nz)).

If you agree to participate in this research, your consent will be assumed by the completion and submission of the questionnaire.

## Appendix C: Survey Content

### Psychological Sense of Organisational Membership (PSOM)

*Please select the response option that best reflects **your experience at work**.*

Items were measured on a 5-point Likert-type response scale (from 1 = “not at all true” to 5 = “completely true”).

1. I feel like a real part of this organisation.
  2. People here notice when I'm good at something.
  3. It is hard for people like me to be accepted here.
  4. Other people in this organisation take my opinions seriously.
  5. Most managers/supervisors in this organisation are interested in me.
  6. Sometimes I don't feel as if I belong here.
  7. There's at least one supervisor/manager in this organisation I can talk to if I have a problem.
  8. People in this organisation are friendly to me.
  9. Managers/supervisors here are not interested in people like me.
  10. I am included in lots of activities at this organisation.
  11. I am treated with as much respect as other employees.
  12. I feel very different from most other employees here.
  13. I can really be myself in this organisation.
  14. The managers/supervisors here respect me.
  15. People here know I can do good work.
  16. I wish I were in a different organisation.
  17. I feel proud to belong to this organisation.
  18. Other employees here like me the way I am.
-



### The Organisational Citizenship Behaviour Scale (OCB-Scale)

*Please select the response option that best reflects **how you typically act at work**.*

Items were measured on a 5-point Likert-type response scale (from 1 = “strongly disagree” to 5 = “strongly agree”).

#### OCB-Altruism

1. I help others who have heavy workloads.
2. I'm always ready to lend a helping hand to those around me.
3. I help others who have been absent.
4. I'm willing to help others who have work-related problems.
5. I help orient new people even though it is not required.

#### OCB-Courtesy

1. I try to avoid creating problems for co-workers.
  2. I consider the impact of my actions on co-workers.
  3. I don't abuse the rights of others.
  4. I take steps to try prevent problems with other employees.
  5. I'm mindful of how my behaviour affects other people's jobs.
- 

### The Short Warwick-Edinburgh Mental Wellbeing Scale (SWEMWBS)

*Please rate the following items pertaining to **your sense of well-being**.*

Items were measured on a 5-point Likert-type response scale (from 1 = “none of the time” to 5 = “all of the time”).

1. I've been feeling optimistic about the future.
  2. I've been feeling useful.
  3. I've been feeling relaxed.
  4. I've been dealing with problems well.
  5. I've been thinking clearly.
  6. I've been able to make up my own mind about things.
-

**Biodemographic Questions**

*Finally, a few questions about yourself that will help with our analysis.*

What is your gender?

Male ☐

Female ☐

Other ☐

What sector are you currently employed or working in?

Private ☐

Public ☐

Other ☐

What is the industry type (e.g., banking, healthcare, etc.) of your current role? \_\_\_\_\_

What is your total length of experience in leadership positions (years)? \_\_\_\_\_

That concludes the questions we have. If you have anything else to add regarding your work environment, please feel free to comment below.

---

\_\_\_\_\_End of Survey\_\_\_\_\_

## Appendix D: Dimension Structures

Table D1

*Initial Component Loadings and Communalities for Idealised Influence and Intellectual Stimulation (MLQ).*

Item	Factor 1
My CEO re-examines critical assumptions to question whether they are appropriate.	.74
My CEO talks about their most important values and beliefs.	.78
My CEO seeks differing perspectives when solving problems.	.83
My CEO instils pride in me for being associated with him/her.	.85
My CEO specifies the importance of having a strong sense of purpose.	.84
My CEO goes beyond self-interest for the good of the group.	.76
My CEO acts in ways that builds my respect.	.83
My CEO considers the moral and ethical consequences of decisions.	.77
My CEO displays a sense of power and confidence.	.65
My CEO gets me to look at problems from many different angles.	.75
My CEO suggests new ways of looking at how to complete assignments.	.78
My CEO emphasizes the importance of having a collective sense of mission.	.78
Eigenvalue	7.32
Percentage of variance (after extraction)	61.00

*Note.* Principal component analysis, varimax rotation.

Table D2

*Initial Factor Loadings and Communalities for the Psychological Sense of Organisational Membership (PSOM) scale.*

Item	Factor 1	Factor 2	Factor 3	Factor 4
I feel like a real part of this organisation.	.05	-.61	.12	.21
People here notice when I'm good at something.	.16	-.09	-.19	.72
It is hard for people like me to be accepted here.	-.08	-.62	.22	.10
Other people in this organisation take my opinions seriously.	.75	.01	-.07	.11
Most managers / supervisors in this organisation are interested in me.	.69	-.01	-.11	.23
Sometimes I don't feel as if I belong here.	-.05	-.85	-.15	.11
There's at least one supervisor/manager in this organisation I can talk to if I have a problem.	.47	-.05	.32	-.08
People in this organisation are friendly to me.	.15	-.15	.73	.11
Managers/supervisors here are not interested in people like me.	.45	-.59	-.20	-.15
I am included in lots of activities at this organisation.	.46	-.09	.08	.15
I am treated with as much respect as other employees.	.76	-.03	.13	.08
I feel very different from most other employees here.	-.03	-.59	.09	.14
I can really be myself in this organisation.	.18	-.44	.30	.14
The managers/supervisors here respect me.	.69	-.11	.09	.12
People here know I can do good work.	.19	-.00	.15	.67
I wish I were in a different organisation.	.06	-.92	-.06	-.11
I feel proud to belong to this organisation.	.17	-.62	.16	-.06
Other employees here like me the way I am.	.07	-.11	.11	.59
Eigenvalue	9.19	1.55	1.08	1.00
Percentage of variance (after extraction)	49.15	6.76	4.34	3.42

*Note.* Principal axis factor analysis, direct oblimin rotation.

Table D3

*Final Factor Loadings and Communalities for the Psychological Sense of Organisational Membership (PSOM) scale.*

Item	Factor 1	Factor 2
I feel like a real part of this organisation.	.12	<b>.68</b>
People here notice when I'm good at something.	<b>.88</b>	-.18
Other people in this organisation take my opinions seriously.	<b>.73</b>	.03
Most managers/supervisors in this organisation are interested in me.	<b>.77</b>	.03
There's at least one supervisor/manager in this organisation I can talk to if I have a problem.	.08	<b>.53</b>
People in this organisation are friendly to me.	-.04	<b>.76</b>
I am included in lots of activities at this organisation.	<b>.47</b>	.22
I am treated with as much respect as other employees.	<b>.62</b>	.26
I can really be myself in this organisation.	.04	<b>.82</b>
The managers/supervisors here respect me.	<b>.62</b>	.29
People here know I can do good work.	<b>.75</b>	.03
I feel proud to belong to this organisation.	-.02	<b>.75</b>
Other employees here like me the way I am.	<b>.58</b>	.11
Eigenvalue	7.06	1.16
Percentage of variance (after extraction)	51.12	5.56

*Note.* Principal axis factor analysis, direct oblimin rotation.

Table D4

*Initial Component Loadings and Communalities for the Organisational Citizenship Behaviour (OCB) scale.*

Item	Factor 1	Factor 2
I help others who have heavy workloads.	<b>.74</b>	.20
I'm always ready to lend a helping hand to those around me.	<b>.87</b>	.14
I help others who have been absent.	<b>.82</b>	.30
I'm willing to help others who have work-related problems.	<b>.79</b>	.33
I help orient new people even though it is not required.	<b>.52</b>	<b>.42</b>
I try to avoid creating problems for co-workers.	.15	<b>.72</b>
I consider the impact of my actions on co-workers.	.39	<b>.69</b>
I don't abuse the rights of others.	.09	<b>.81</b>
I take steps to try prevent problems with other employees.	.37	<b>.69</b>
I'm mindful of how my behaviour affects other people's jobs.	.48	<b>.62</b>
Eigenvalue	5.20	1.18
Percentage of variance (after extraction)	34.46	29.41

*Note.* Principal component analysis, varimax rotation.

Table D5

*Initial Factor Loadings and Communalities for the Short Warwick-Edinburgh Mental Wellbeing Scale (SWEMWBS).*

Item	Factor 1
I've been feeling optimistic about the future.	<b>.65</b>
I've been feeling useful.	<b>.56</b>
I've been feeling relaxed.	<b>.61</b>
I've been dealing with problems well.	<b>.86</b>
I've been thinking clearly.	<b>.81</b>
I've been able to make up my own mind about things.	<b>.71</b>
Eigenvalue	3.48
Percentage of variance (after extraction)	50.27

*Note.* Principal axis factor analysis, direct oblimin rotation.

### Appendix E: T-Test and Descriptive Statistics

Table E1

*Results of t-test and Descriptive Statistics for all Variables.*

	Sex				95% CI for Mean Difference	t	df
	Male		Female				
	M	SD	M	SD			
Idealised Influence	3.38	.93	3.68	1.00	-.71, .11	-1.47	88
Intellectual Stimulation	3.06	.97	3.10	1.04	-.46, .39	-.18	88
Belonging	3.73	.85	3.91	.74	-.51, .15	-1.08	90
Well-Being	3.59	.73	3.57	.70	-.28, .31	.09	92
OCB-Altruism	4.05	.79	4.39	.70	-.64, -.03	-2.18*	92
OCB-Courtesy	4.37	.61	4.62	.39	-.45, -.04	-2.33*	90
Tenure	4.82	4.60	4.82	4.78	-1.97, 1.98	.00	89

*Note.* \*  $p < .05$ , \*\*  $p < .01$  (two-tailed).